MacWEEK

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Management, DAL top latest MacIS wish list

By Rochelle Garner

San Francisco — The board of Managing Apple Computers in Information Systems (MacIS) last week presented Apple executives with an explicit list of issues they want Apple to resolve.

The top-10 list was voted on by about 170 members attending the MacIS conference in Washington earlier this month (see MacWEEK, June 11). It shared a number of items with a list the elite group of Mac managers sent to Apple after its meeting in December. The items on the list were as follows:

▸ **Deliver network tools.** Sixty-nine percent of attending MacIS members said they need

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MacIS' top 10 issues

1. Network-management tools **69%**
2. Data Access Language **65%**
3. System-software security **59%**
4. Publish client-server architecture vision **51%**
5. "Commercial-strength" support infrastructure **51%**
6. Network security **49%**
7. A full notebook line **42%**
8. Improved TCP/IP support **38%**
9. Ethernet built into CPUs, printers **36%**
10. More support of "alliance" products **34%**

Source: MacIS. Percentages reflect number of votes received.

KEVIN BERGER

Oct. 21 rollout set for tower, notebook Macs

By MacWEEK staff

Cupertino, Calif. — The current book on when customers will be able to purchase one of the new Mac notebook computers is Oct. 21.

Current plans, sources said, call for a major product rollout on that date. Products expected to debut include three new notebook-size Macs, ranging from 5.3 to 7 pounds; a 68040-based floor-standing Mac; a 68040-based desktop model; and a 68030-based Classic (see MacWEEK, June 4 and May 21).

If Apple is able to stay on schedule, the rollout will coincide with the opening of Comdex/Fall '91 in Las Vegas. Timing the product debuts with Comdex, where Apple and the Mac have been minor players, reflects Apple's new-found determination to move into the computing mainstream and win customers away from MS-DOS and Windows, sources said.

The new product introductions are expected to bring price reduc-

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Apple, IBM powwow at superpower summit

Alliance may make Microsoft see red

By Daniel Farber and Andrew Gore

Cupertino, Calif. — Hoping to create an alliance with the mightiest of computer manufacturers and find partners who will help finance development of new products, Apple executives last week attended a summit meeting at IBM Corp.'s Armonk, N.Y., headquarters.

Discussions at the "purple" summit (combining Big Blue and Apple red) centered on three primary possibilities, sources said:

▸ Licensing by IBM of some or all of a new, processor-independent Apple operating system code-named Pink.

▸ A joint venture between the two companies to develop the Pink operating system.

▸ Adoption of the RS/6000, an IBM-developed RISC (reduced instruction set computing) microprocessor, for use in future Apple workstations and desktop computers.

Apple and IBM officials declined to comment.

See Apple/IBM, Page 108

Symantec has integrated app in the Works

By Carolyn Said

Cupertino, Calif. — For years, the market for Macintosh integrated software has been a small pond dominated by a big fish — Microsoft Corp. But over the next few weeks, two other leviathans will plunge into that market, lured by the growing pool of home and small-business Macintosh users that probably will increase demand for low-cost packages that combine the functions of several applications.

Symantec Corp., based here, next week is expected to announce its acquisition of the Leonard Development Group Inc. of Jacksonville, Fla., and the eight-application package it introduced last fall as Leonard SmartWorks (see MacWEEK, Oct. 23, 1990). Symantec

See Symantec, Page 106

Apple plans to join 16-inch color club

E-Machines to get big-time competition

By Neil McManus

Cupertino, Calif. — Apple's color display line will turn sweet 16 when the company introduces a relatively low-cost 16-inch Sony Trinitron monitor this winter, sources said.

The 16-inch display, to be manufactured by Sony, reportedly will be priced at $1,599. Along with a 21-inch color monitor that Apple is expected to release for less than $5,000 (see MacWEEK, May 14), the 16-inch display will shore up the company's high-end display line.

The new large-screen color displays will be aimed at users of the two new 68040-based Macs, due in October (see MacWEEK, June 4). The '040 Macs reportedly contain a built-in video controller that can provide 24-bit color to 16-inch screens (with additional video RAM) and eight-bit color to screens as large as 21 inches.

"Why would you want to buy an '040 machine and have a little dinky 13-inch monitor?" said Pieter Hartsook, manager of the Mac research program at International Data Corp.'s Mountain View, Calif., office.

See Monitors, Page 108

E-Machines' new ColorPage E16 monitor (see story, Page 6) will have some company in the 16-inch color display market when Apple introduces its entry this winter.

Apple weighs RISC options

IBM, Motorola, others in running

By Raines Cohen

Cupertino, Calif. — For more than a year, Apple has admitted that RISC technology is key for the next generation of Apple computers. But, sources said, the company has not yet decided on a RISC (reduced instruction set computing) processor architecture and is not expected to deliver a RISC-based machine until 1993.

Apple is turning to a diverse set of potential partners in an effort to find a RISC processor for its next-generation operating system.

Last week's reports of an Apple-IBM get-together led to widespread speculation that Apple will choose IBM's RS/6000 RISC processor for its new operating system (see story, this page).

RS/6000 is a five-chip set that runs only in IBM RS/6000 POWERstations and POWERservers. Motorola might be involved in manufacturing the chips for Apple, sources said.

▸ **88110.** On firmer ground, Apple is known to be considering Motorola's 88110 chip, which includes functions that Apple specifically requested.

"I think it would be crazy for Apple to go with the RS/6000. How would it compete with IBM?" said Andrew Allison, editor of ISC Management newsletter in Los Altos, Calif.

Allison said Apple would be best off continuing its development work with Motorola's 88110 RISC CPU.

See RISC, Page 106

Beg, Borrow,

Introducing the PostScript-compatible LaserScript LX.

Forget about having to beg or borrow a printer, because at $1,995 the LaserScript LX™ is a steal. It's faster than a LaserWriter II NTX, with some features the NTX doesn't have. Like four active ports, so you can connect both Macs and PCs to the same printer—with or without a network. And automatic emulation switching, so you can switch between PCL 4 and PostScript-compatible languages without using the front panel.

But the most attractive feature of the LaserScript LX is that all this performance won't break the bank—which is important in these economic times. For the dealer nearest you, call Abaton toll-free at (800) 444-5321 or (415) 683-2226. At $1,995, it would be a crime to spend any more.

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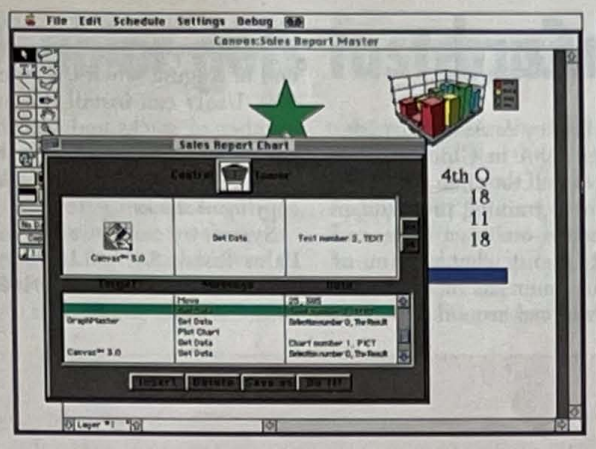

Simple Software's ControlTower, shipping to developers this week, can control interapplication communications-aware applications such as Deneba's Canvas 3.0, shown here, and help them exchange data with other applications.

ControlTower scripting app supports Apple 'object model'

By Raines Cohen

Mill Valley, Calif. — Apple's Open Scripting Architecture, announced last month (see MacWEEK, June 4), lays the groundwork for standardized scripting of Apple events. But with compatible scripting systems not yet available, developers have had no easy way of testing applications' program-linking functions, and users couldn't drive the slowly increasing number of Apple events-aware applications.

Simple Software Inc. broke that barrier last week when it shipped ControlTower, the first scripting environment to use what Apple calls the "object model," its structure that defines a common syntax for events. Although an end-user version is not due until late this year, the initial release should prove useful for testing applications under development, as well as for simple batch processing and unattended operation of some System 7.0-savvy applications.

ControlTower uses a browsing metaphor. Users select the application to which they want to send an event, then choose the desired event from a list. Each application supplies a list of the Apple events it supports.

The $149.95 program supports all of the standard Apple events suites, as well as its own suite of programming events for scripting control. These include If, While, Set Variable, On Error and Pause. ControlTower maintains user and programmer log files for debugging and auditing.

Simple Software's application incorporates the functions of the company's earlier NightLIFE product, enabling ControlTower to run scripts at preset times. Because many Apple event-aware applications can run without user intervention, the program will be able to run tests and processes unattended at off-peak hours.

"It's a very easy method for users to set up a simple script for sending Apple events," said Andrew Chilvers, product manager at Visual Business Systems Inc. of Atlanta. Chilvers showed ControlTower managing Deneba Software's Canvas 3.0 and his company's GraphMaster product. "Using the object model, [ControlTower] was able to select some text blocks in Canvas, send them to GraphMaster for 3-D rendering and bring the resulting image back to Canvas."

Purchasers of the developer's version will receive free updates to ControlTower up to and including the initial commercial release. Site licenses are available, and a one-year money-back guarantee is included.

Simple Software Inc. is at 220 Redwood Highway, Suite 42, Mill Valley, Calif. 94941. Phone (415) 381-2650; fax (415) 381-6417. □

IBM offers rebates in trade for Macs

By Dartanyan L. Brown

White Plains, N.Y. — If you've got the urge to dump that old compact Mac and get a "real" computer straight from Big Blue, IBM Corp.'s got a deal for you.

The Armonk, N.Y.-based giant last week announced here a rebate plan designed to lure owners of Mac 512, 512KE, Plus, SE and SE/30 machines, as well as owners of older IBM and Compaq PCs, into the PS/2 camp.

Customers buying a new PS/2 will receive a discount based on two factors: the value of the machine they are trading in and the price of the IBM model they are purchasing. Rebates on Macs range from $100 to $1,250; for older IBM PCs amounts range from $35 to $975.

The rebate program was announced in connection with the rollout of several new PS/2 models last week. The lineup includes several aggressively priced systems based on a 20-MHz Intel 386SX chip, some of them using the older AT bus instead of the Micro Channel Architecture. The Model 57 SX, a new Micro Channel machine designed as a replacement for the best-selling Model 55 SX, comes standard with a new 2.88-Mbyte floppy disk drive. IBM also announced a 3.5-inch erasable optical drive and a color touchscreen.

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Symmetrical stacks will run without HyperCard

StackRunner! utility installs runtime engine

By Raines Cohen

Scottsdale, Ariz. — Symmetry Software Corp. last week announced StackRunner!, a new utility that can turn HyperCard stacks into double-clickable applications.

Although stacks are a convenient format for electrically publishing data, the software needed to read them — Claris' HyperCard — is no longer as universal or convenient as it once was. When a user sends a HyperCard 2-formatted stack to a business contact or a vendor distributes a guided tour in stack format, there's no longer a guarantee that the recipient will be able to read it.

Symmetry's product, scheduled to ship next month, solves the problem by installing a 150- to 200-Kbyte runtime engine into the stack. The technique is based on the HyperEngine technology that the company sells to application developers, including Lotus Development Corp. and Claris Corp., for use in their on-line help systems. Symmetry also uses the routines in HyperDA, its stack-running desk accessory (see MacWEEK, Feb. 19), and StackDA, an installer that converts stacks into desk accessories.

StackRunner! is not a full implementation of HyperCard, but it does allow users to browse, search, edit text in, copy graphics from and print stacks. It can install onto both HyperCard 1.x and 2.x stacks, and it provides multiple windows, visual effects and limited support for externals. The product's implementation of HyperTalk supports user-defined handlers, as well as both local and global variables.

A menu lets users de-install StackRunner!, stripping off the code and converting the file back into a stack. Once de-installed, the stack can be edited in HyperCard like any other stack.

"If you're developing for teaching purposes, it's the best thing since sliced bread," said Dorian Cougias, information technology consultant at Hawkey & Associates Inc., a division of Wace USA in Chicago. "We can create a stack in half the time it takes to create a conventional training tool, add in our own fonts, assign our own icon, and not have to worry about what version of HyperCard the customer has or carry that 1,500 Kbytes of overhead around. It lets us design custom training solutions really fast."

StackRunner! will sell for $79 until the end of August, when the price will go up to $99. Users can install the engine into any number of stacks and distribute up to 250 copies royalty-free. A distribution license, priced at $150 per year, allows unlimited copying of stacks.

Symmetry Software Corp. is at 8603 E. Palm Road, Suite 110, Scottsdale, Ariz. 85258. Phone (602) 998-9106 or (800) 624-2485; fax (602) 991-0572. □

Ceres Software gives users new Inspiration

By Carolyn Said

Portland, Ore. — Ceres Software Inc.'s Inspiration has always helped users map out their ideas, but with Version 3.0 of the outlining and diagramming application, users also can transform those ideas into polished presentations and documents, the company said.

Inspiration is designed to help users give shape to their thoughts with visual representations of relationships, information flows or sequences of events. The upgrade, released last month, lets users add their own symbols and icons, importing and customizing graphics and symbols in both diagram and outline views. Templates of documents and charts, as well as custom symbols and graphics, can be stored for frequent use.

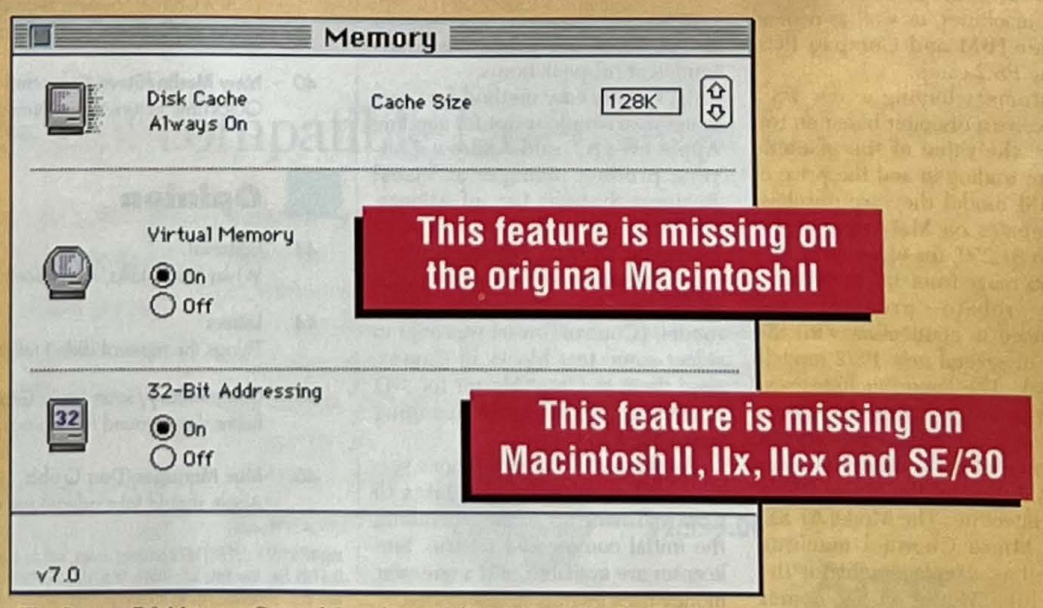
The new version also adds the ability to layer and link diagrams and outlines, allowing the user to break up large or complex concepts into manageable pieces, Ceres said. Version 3.0 also ships with a spelling checker.

Both Version 3.0 and the preceding release, Version 2.05, are System 7-compatible. The next release will add System 7-savvy capabilities, Ceres said.

Inspiration's price is now $295, up from $199. Registered users can upgrade for $35, plus shipping and handling.

Ceres Software Inc. is at 2520 S.W. Hamilton St., Portland, Ore. 97201. Phone (503) 245-9011; fax (503) 246-4292. □

You could be missing the best parts of System 7.0



The System 7.0 Memory Control Panel on a fully compatible Macintosh.

DiskDoubler gets faster, savvier

By Henry Norr

Palo Alto, Calif. — Salient Software Inc. last week released DiskDoubler 3.7, an upgrade that author Lloyd Chambers described as the most significant of the many that the compression utility has undergone in its 16-month history.

In addition to offering both faster and tighter compression, the new release makes DiskDoubler the first System 7-savvy program in its category. Version 3.7 incorporates Apple events for compressing and expanding files, allowing other programs, even on different machines, to have DiskDoubler process files on request.

The $79.95 program also will take advantage of Finder 7.0's drag-and-drop capability. When the user drops a file icon over DiskDoubler's, the program will automatically compress uncompressed files and expand previously compressed ones. Other System 7.0 features include balloon help, color icons and support for aliases.

Enhancements for users of both old and new versions of the operating system include the following:

▸ **Tighter compression.** A new algorithm delivers smaller compressed files than any other product on the market, according to Salient. The new method incorporates code obtained under a non-exclusive license from Bill Goodman, author of the popular shareware utility Compactor Pro.

▸ **More speed.** The speed of DiskDoubler's default algorithm has been increased, and the program now works as much as 50 percent faster with Sigma Designs Inc.'s DoubleUp compression card. A new configuration option provides an additional speed increase when the program is processing groups of small files.

▸ **Self-expanding archives.** Version 3.7 lets users create compressed files that others can open with a double click, even if they have no Salient software.

Other new features include background operations and a file-copying function that Salient said is twice as fast as the Finder's.

Upgrades are $15, but free to customers who purchased an earlier version after April 15.

Salient Software Inc. is at 124 University Ave., Suite 300, Palo Alto, Calif. 94301. Phone (415) 321-5375; fax (415) 321-5378. □

If you have a Mac II, IIx, IIcx or SE/30, make sure you get 32-bit mode and virtual memory

Your Macintosh II, IIx, IIcx or SE/30 doesn't have the 32-bit capability of the most recent systems. So you won't get 32-bit mode when you upgrade to System 7.0. You'll be missing out on a powerful new technology which can allow you to access much more memory and run programs faster.

That's why we created MODE32,™ a simple, affordable software solution that enables older Macintoshes to run in 32-bit mode.

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MODE32 breaks through the 8 megabyte memory barrier to access up to one full gigabyte of virtual memory (VM), or as much physical RAM as you can put in your Macintosh.

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Complete Capability 7.0 Macintosh II, IIx, IIcx & SE/30

MODE32 is the 32-bit solution

Unless you have MODE32, your Mac II, IIx, IIcx or SE/30 won't run 32-bit mode – or even display it as an option in the memory control panel. To make your Macintosh work like the new generation of machines, just copy MODE32 into your system folder.

Here's the best part: MODE32 gives you full 32-bit mode operation under System 7.0 for only $169.

For the original Mac II, there's another catch

If you have an original Mac II, there is something else you need to know: virtual memory is completely missing, and won't even appear in your control panel.

Virtual memory (VM) lets you increase your Mac's memory without having to install any additional SIMMs.

Your Mac II needs a Motorola PMMU coprocessor to run virtual memory. Connectix sells the current Mask 73 version of the PMMU, the only version that is known to be fully compatible with the Macintosh. When you upgrade to System 7.0, just add a Connectix MC73™ PMMU for only $179 to get virtual memory on your original Macintosh II.

Upgrade to all of the benefits of System 7.0

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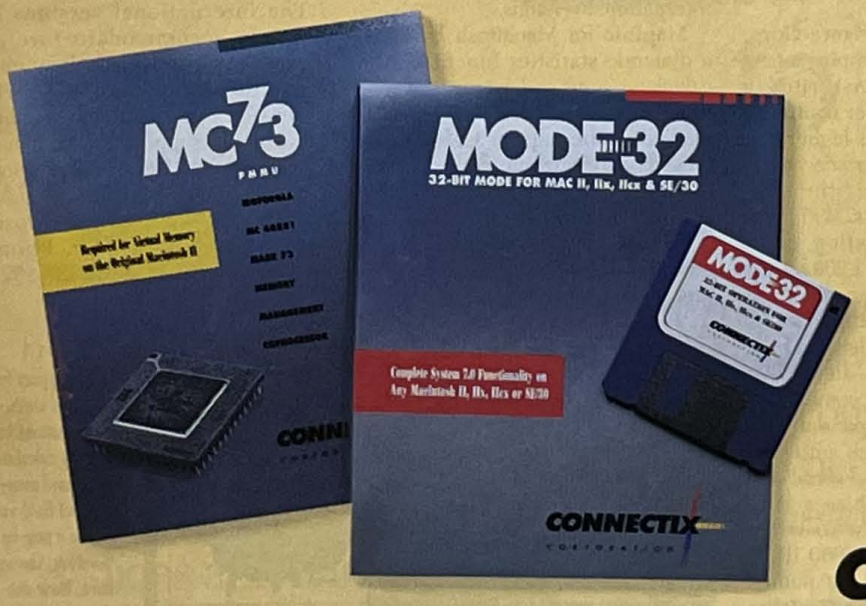
And, if you have an original Mac II, you need the MC73 to enjoy all of the advantages of virtual memory.

To order MODE32 or an MC73 PMMU, call your supplier or call Connectix direct at **(800) 950-5880** or **(415) 324-0727**.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Two programs designed to ease data formatting

By Raines Cohen

Van Nuys, Calif. — When you download tabular data from a corporate mainframe or an on-line service or read in printed reports with a scanner and character recognition software, the next step is often to bring the material into a Mac database or spreadsheet. But since few such applications are capable of parsing out formatted data or extracting just the desired fields, the job can involve extensive manual reformatting.

A new program from WorksWare Computer Software Solutions, as well as an older utility from Seawell MicroSystems Inc., is designed to alleviate this problem.

▸ **WorksWare's DataMate.** WorksWare developed its data-extraction application, called DataMate, to enhance its line of vertical packages for real-estate agents. The packages work with formatted data downloaded from on-line multiple-listing services.

The $149 utility, released last month, can extract data, reorder fields, change delimiters and eliminate duplicate records as it processes text. Users can create and save filters identifying the source data and specifying which operations to perform on which fields.

DataMate can merge files and save in a variety of formats, including text files that can be read directly by Microsoft Works and Excel, Panorama, Wingz, FileMaker Pro, and others.

A demo version of the program is available on disk for $10 and for free on on-line services.

▸ **Seawell's DataMerge.** Seawell MicroSystems' data processing utility, DataMerge 2.0, performs many of the same functions as DataMate, but because it does not load the files into RAM, the Seawell software can handle extremely large files, according to the company.

The $99 program lets users create menus of common transfer formats, for easy access later on. The program can skip or add line feeds often present in on-line files and non-Mac documents.

WorksWare Computer Software Solutions is at 8031 Broadleaf Ave., Van Nuys, Calif. 91402. Phone (818) 989-2298; fax (818) 994-3550.

Seawell MicroSystems Inc. is at P.O. Box 22030, Seattle, Wash. 98122. Phone (206) 322-3123 or (800) 347-7008. □

Tektronix rolls out solid-ink printer

PhaserJet PXi offers tabloid-size color

By Neil McManus

Wilsonville, Ore. — Tektronix Inc. this week will announce its PhaserJet PXi, a solid-ink Post-Script Level 2 printer that offers tabloid-size color output on plain paper.

Due next month for $9,995, the 300-dpi printer will come with 36 Type 1 fonts and 10 Mbytes of RAM, expandable to 18 Mbytes.

A 24-MHz AMD Am29000 RISC (reduced instruction set computing) processor enables the printer to image a full-color PostScript page in two minutes and a monochrome page in 40 to 60 seconds.

The PhaserJet PXi can handle a variety of paper stocks, including thin drafting vellum, overhead transparencies and 80-pound cover stock, in sizes up to 12 by 18 inches. It comes standard with a 200-sheet letter-size paper cassette; a 200-sheet 11-by-17-inch cassette is available as a $150 option.

The printer can automatically switch among its AppleTalk, Centronix parallel and RS-232 serial interfaces without user intervention.

Until Mountain View, Calif.-based Adobe Systems Inc. releases its PostScript Level 2 printer driver for the Mac in the fall, the Tektronix printer will use a Level 1 driver that doesn't take advantage of such Level 2 features as compression, improved memory management, forms caching, composite fonts and device-independent color matching.

In addition to PostScript, the Tektronix printer can emulate Hewlett-Packard Co.'s HP-GL plotter language.

Tektronix PhaserJet PXi offers a palette of more than 8 million colors and can print on a variety of paper stocks.

Tektronix's PhaserJet PXi printer images with four colored, wax-based, solid-ink bars (cyan, magenta, yellow, black), which look and feel like crayon. The ink is melted, and droplets are propelled onto the page, where they instantly resolidify.

Industry analysts (see MacWEEK, June 11) say solid-ink printers offer a number of advantages over thermal-transfer color printers, including plain-paper output, vibrant colors, relatively fast engine speeds and lower consumables costs.

Consumables for the Tektronix printer average 25 cents for a color page, half the comparable figure for thermal-transfer printers.

Tektronix Inc.'s Graphics and Imaging Division is at P.O. Box 1000, 26600 S.W. Parkway, Wilsonville, Ore. 97070. Phone (503) 682-7377 or (800) 835-6100; fax (503) 682-3408. □

E-Machines adds lower-cost model to midsize color-display lineup

Futura accelerates Apple monitors

By Neil McManus

Beaverton, Ore. — Setting its sights on budget-conscious users, E-Machines Inc. this week will extend its color display line to include a lower-priced 16-inch monitor, an eight-bit video board for 16-inch displays and a 24-bit board for 13-inch displays.

▸ **ColorPage E16.** Due July 1, this new 16-inch color monitor will retail for $1,595, nearly $1,000 less than its other 16-inch displays.

The ColorPage E16 is a flat-square CRT manufactured by Toshiba, while the company's previously available ColorPage T16 and ColorPage TX16, both priced at $2,500, are Sony Trinitron displays.

The E16 is a trisync monitor, capable of three resolution modes: 640 by 480 pixels at 55 dpi using the built-in video of the Mac LC, IIsi or IIci; 832 by 624 pixels at 72 dpi with E-Machines' XL8 and XL24 and upgraded Futura/24 boards; and 1,024 by 808 pixels at 87 dpi, although no current E-Machines board can drive it at that resolution.

▸ **ColorPage/XL8.** Available now for $995, this NuBus board can provide eight-bit color on E-Machines' 16-inch displays and Apple's 12- and 13-inch RGB monitors.

E-Machines also offers a $500 auxillary board that upgrades the ColorPage/XL8 to 24-bit color.

▸ **Futura/24.** This NuBus display board, available now for $995, brings accelerated 24-bit color to Apple's 12- and 13-inch RGB monitors.

A $500 E-Machines kit upgrades the Futura/24 to an XL24 card, allowing it to bring 24-bit color to the company's 16-inch monitors.

Both the Futura/24 and the ColorPage/XL8 provide built-in QuickDraw acceleration and hardware pan and zoom.

The new E-Machines display cards also contain inputs for NTSC (National Television System Committee) and PAL (a European standard), which give users video-in and video-out capabilities when coupled with E-Machines' $2,495 QuickView Studio video digitizer and the $575 QuickView Video encoder.

E-Machines Inc. is at 9305 S.W. Gemini Drive, Beaverton, Ore. 97005. Phone (503) 646-6699; fax (503) 641-0946. □

Users do multimedia presentations on the go with Ovation and Cyclops

By Nathalie Welch

San Diego — Ovation, a new color LCD projection panel due next week from Proxima Corp., promises Mac users an interactive multimedia projection device weighing less than 6 pounds.

When placed on top of a standard overhead projector, the $8,495 portable panel provides large-screen projection of charts, graphs, real-time video and computer animation in as many as 24,389 colors.

Proxima's Ovation projection panel includes the Cyclops pointer system, which is used to control a software presentation directly on the projection screen.

Ovation's active-matrix panel provides the rapid response time needed to project live motion without distortions, according to the company.

Ovation can be used with any Mac, but models without an external video port require an interface kit consisting of video board and cable.

The kit must be purchased separately from Proxima for prices ranging from $100 to $170, depending on Mac model.

Cyclops, a pointer system that acts as a cordless mouse, gives the presenter the ability to control the demonstration, including pulling down menus, clicking on buttons and dragging icons, by touching the wand to the wall screen. A remote-control device also is included to control the Ovation panel itself.

Ovation can be purchased in configurations that support either the U.S. NTSC (National Television System Committee) video-signal standard or the European PAL standard.

Proxima Corp. is at 6610 Nancy Ridge Drive, San Diego, Calif. 92121-3297. Phone (619) 457-5500; fax (619) 457-9647. □

For the Record

The June 4 issue gave incorrect prices for U.S. buyers of GT Omnicom Inc.'s QPID. Correct prices are $30 for the demo version, $695 for one user and $2,500 for a five-pack.

Higher resolution for Accel-A-Writer

Montrose, Ala. — Xante Corp. this week will begin shipping a new version of its Accel-A-Writer, a RISC-based LaserWriter controller upgrade that now offers higher resolution and a SCSI interface.

New firmware gives the controller, still priced at $2,495, true 600-by-600-dpi resolution, compared with the previous 1,200 by 300 dpi. The product is compatible with the original LaserWriter, LaserWriter Plus and II models, and the Personal LaserWriter SC and NT.

The Accel-A-Writer comes with 6 Mbytes of RAM, expandable to 16 Mbytes. It can switch automatically among AppleTalk, serial and Centronics parallel interfaces without user intervention. The controller uses a 16-MHz AMD 29000 RISC (reduced instruction set computing) processor and the PhoenixPage PostScript interpreter from Phoenix Technologies of Norwell, Mass.

Xante Corp. is at 23800 Highway 98, Montrose, Ala. 36559. Phone (205) 990-8189; fax (205) 990-8489. □

MapInfo adds stats function, more user control of maps

By Raines Cohen

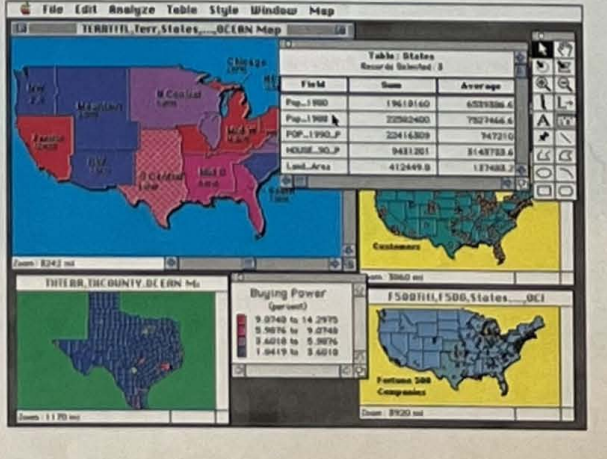
Troy, N.Y. — MapInfo Corp. last month released new versions of its desktop mapping package for both Mac and Windows, as well as international versions.

MapInfo for Macintosh 1.1 adds a dynamic statistics function that calculates sums and averages of values in database fields for "what-if" analysis. Clicking on California, Nevada and Arizona, for example, can sum and average a company's annual sales for those states.

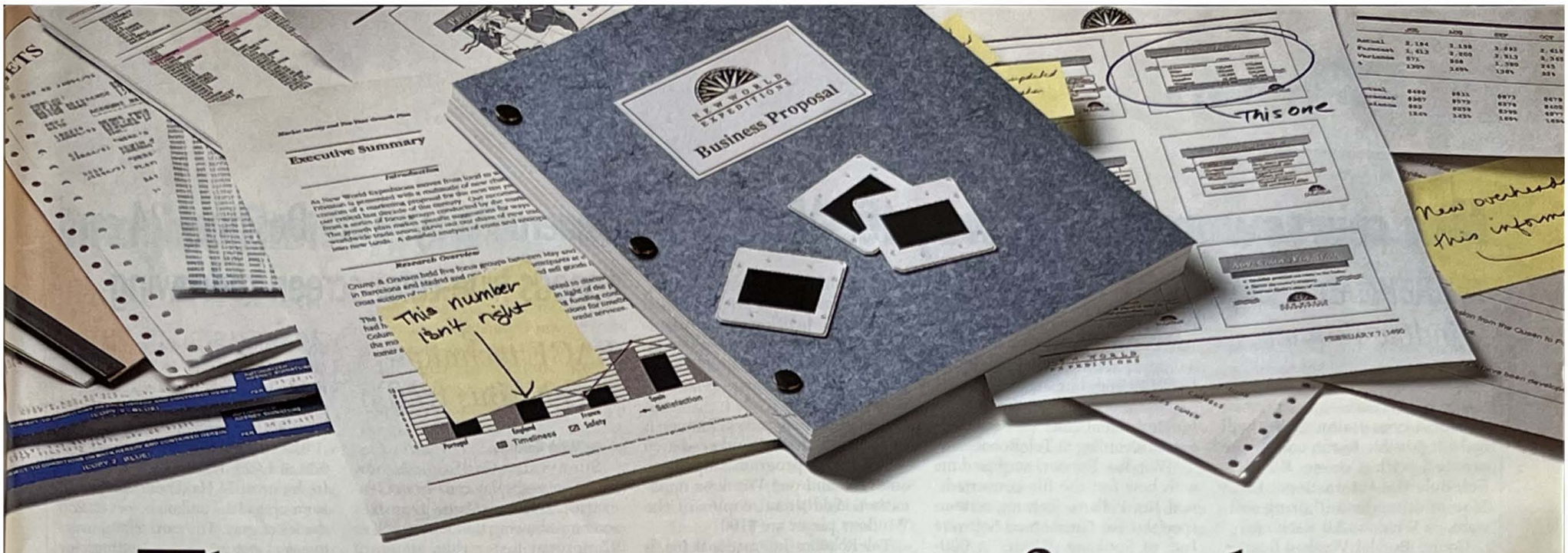
The $995 program, which all currently registered users will receive free, also includes new dot-density maps and graduated symbols for improved user control of map appearance. It now can locate an intersection if users enter the names of cross streets.

The international versions of MapInfo accommodate foreign address structures and allow customization of menus and help screens. The international versions also provide support for hardware copy protection. International prices vary, depending on the distributor.

MapInfo Corp. is at 200 Broadway, Troy, N.Y. 12180. Phone (518) 274-8673 or (800) 327-8627; fax (518) 274-0510. □



MapInfo 1.1 adds support for dynamic statistics functions to display calculated sums and averages of field values in a pop-up window, shown here. New dot-density maps can add depth to map representations of data.



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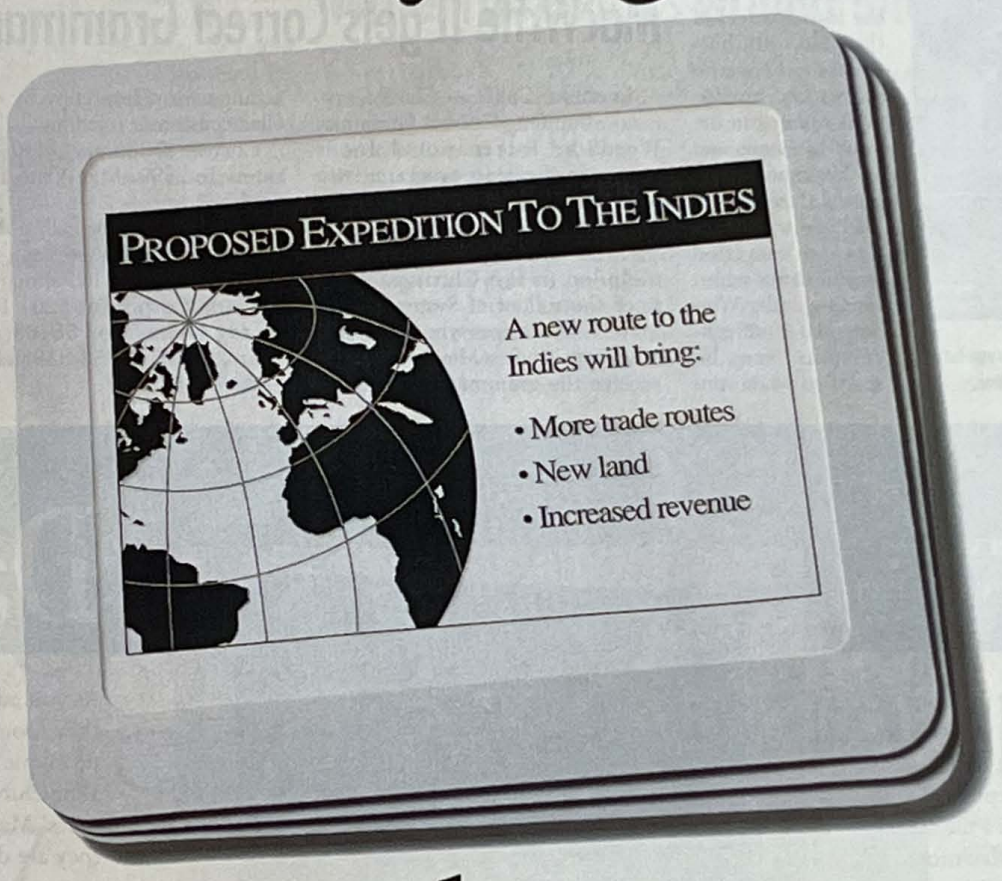

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Mac courseware on the way to Windows

TeleRobotics to ship Window Runner

By Mitch Ratcliffe

Knoxville, Tenn. — A new cross-platform conversion utility will make it possible to run courseware created with Course Builder, TeleRobotics International Inc.'s Mac multimedia authoring software, on Windows 3.0 machines.

Course Builder Window Runner, due in July, will be priced at $995. Course Builder itself is $1,495.

Window Runner will ship with two files: a Mac application that converts Mac-generated Course Builder documents and a Windows 3.0 application that runs them on IBM PCs and compatibles. Training sequences and presentations should function identically on both platforms, according to TeleRobotics.

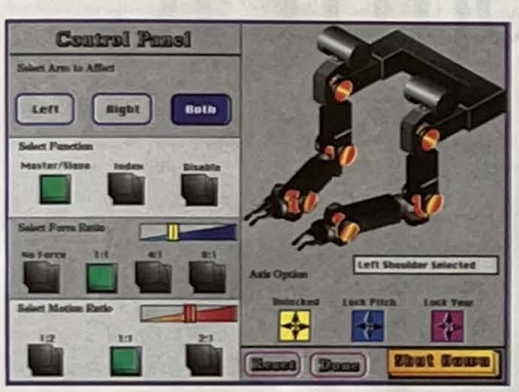
"(Window Runner) surprised me with how fast the file converted," said Jim Pollard, learning systems specialist for Guaranteed Software Inc. of Spokane, Wash. "A 600-Kbyte hypertext file with a few graphics converted in less than a minute," he said.

Converted files, Pollard said, retain the look and feel of the Mac, with buttons in the same places and animations running in the same sequence and at the same speed. One difference, he said, is that Mac fonts are converted to PC fonts when running under Windows 3.0. Font conversions can be specified when running the Macintosh application.

Conversions can be performed over the network or with standalone Macs equipped with an Apple SuperDrive or any third-party product that lets a Mac mount a PC disk.

One copy of Window Runner is required for each Windows-based system. The program ships with one Mac and one Windows application. Additional copies of the Windows player are $100.

TeleRobotics International Inc. is at 8410 Oak Ridge Highway, Knoxville, Tenn. 37931. Phone (615) 690-5600; fax (615) 690-2913. □



Course Builder Window Runner lets Windows 3.0 users run interactive courseware created with Course Builder on the Mac.

Generation Systems' Designer 24 card speeds true-color screen redrawing

RACE technique cuts NuBus traffic

By Mitch Ratcliffe

Sunnyvale, Calif. — A new 24-bit color display card from Generation Systems Inc. promises screen redrawing that is as much as 25 percent faster than standard true-color display cards.

The Designer 24, priced at $1,995, relies on a technique Generation calls redundant access cycle eliminator (RACE) to boost performance by avoiding redundant output to the NuBus. The card also supports NuBus block-mode transfers.

The Designer 24 delivers a resolution of 1,024 by 768 pixels with a refresh rate of 74 Hz. Users can choose from up to 16.7 million colors or 256 shades of gray. The card allows users to select output gamma settings for Sony and Ikegami monitors.

According to Generation Systems, The Designer 24 is compatible with the Display Card 8•24 GC, Apple's $1,999 QuickDraw accelerator card, and with the acceleration techniques built into many graphics programs.

Because the Generation Systems card requires less than 15 watts, the company said, it can be used safely in the Mac IIsi. Many competing graphics accelerators, including Apple's, exceed the IIsi's tight power budget, although the companies said their cards can be used in the single-slot machine under normal conditions.

Generation Systems is at 1185-C Bordeaux Drive, Sunnyvale, Calif. 94089. Phone (408) 734-4626 or (800) 325-5811; fax (408) 734-4626. □

MacWrite II gets Correct Grammar

Sausalito, Calif. — Claris Corp. is now bundling Correct Grammar, WordStar International Inc.'s grammar-checking program, with MacWrite II, its Mac word processing software.

Correct Grammar has been included in the Claris package since the rollout of System 7.0 on May 13. Customers who purchased MacWrite II after May 1 but didn't receive the grammar checker can arrange for a free copy by calling Claris customer relations.

Correct Grammar retails separately for $99. MacWrite II lists for $249.

WordStar was originally published by Lifetree Software Inc., which WordStar acquired in February.

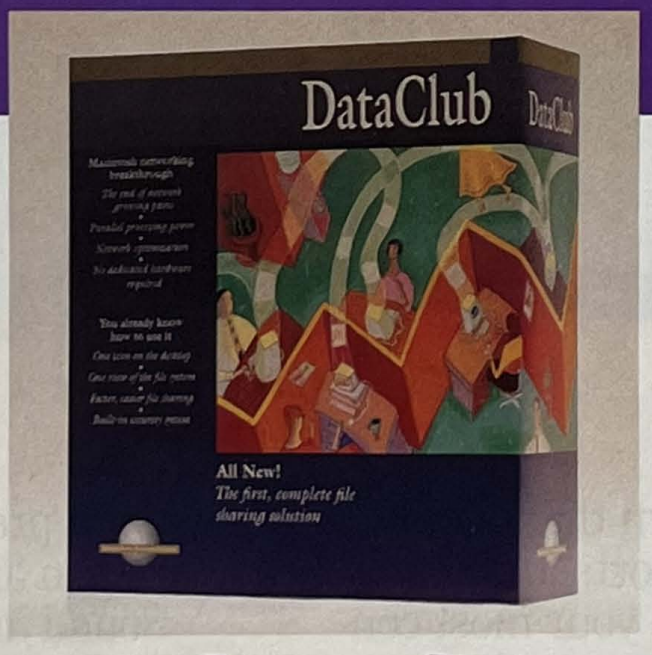
Claris Corp. is at 5201 Patrick Henry Drive, Box 58168, Santa Clara, Calif. 95052-8168. Phone (408) 727-8227. □

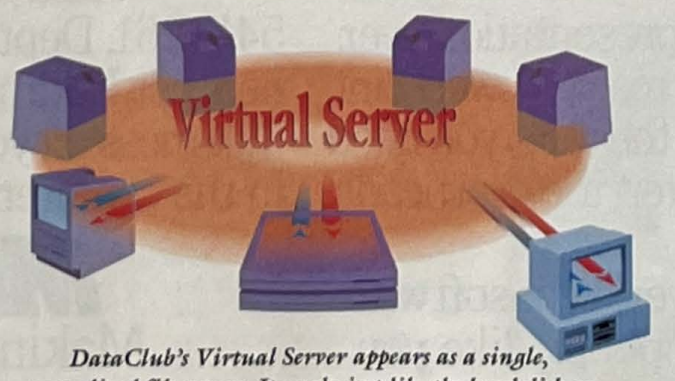
Get a dedicated file server without the hardware expense

DataClub

DataClub® lets every Mac on your network contribute to network file sharing. And it's so easy, you already know how to use it! At the heart of DataClub is the concept of a Virtual Server™. A Virtual Server is a file server that doesn't reside on any single Macintosh, but rather uses free space on hard disks already on the network. DataClub then treats this free space – no matter how many machines it's on – as a single file server that appears as one desktop volume to anyone needing to share files.

Because DataClub's Virtual Server doesn't reside on just one Mac, you also avoid network bottlenecks caused by many users vying for the processing attention of a single machine.





DataClub's Virtual Server appears as a single, centralized file server. It works just like the hard disk on your Mac. And PC's have access, too.

As you add new Macs to the network, they too can contribute to the Virtual Server. A unique time-slice mechanism means DataClub operates in the background of users' Macs without interrupting the work they are doing.

Even if a Mac is turned off or disconnected from the network, the Virtual Server continues to operate. Administration features include familiar password protection and centralized back-up. Even IBM-compatibles can access files on the Virtual Server using Farallon's PhoneNET Card PC and PhoneNET Talk (formerly AppleShare PC).

And DataClub is so simple to install, you already know how to do that, too!

System 7 Users
DataClub allows client access from System 7 machines. So every Mac in your network can share information – today!

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International Business Software, Inc. 1270 Oakmead Parkway, Suite 314, Sunnyvale, CA 94086-4034 (408) 522.8000

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Imagine That! extending simulation to 7.0

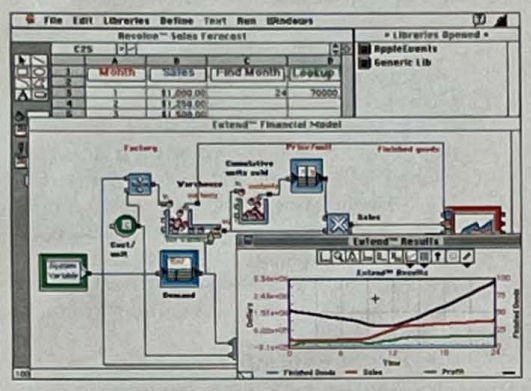
Savvy version will offer program links

By Rochelle Garner

San Jose, Calif. — Imagine That! Inc. imagines a world in which its Extend simulation software will be closely linked with other System 7.0-savvy applications, automatically retrieving data stored in other programs' files, calling on expert systems to check its assumptions or spreadsheets to assist it in calculations, and publishing its results to other programs and networked users. The company is rewriting its program to make that vision a reality.

Like current versions, Extend 2.0 will offer a graphical programming environment for simulating a range of continuous or discrete processes. Icons are logically linked via a schematic diagram.

Due by year-end, the new System 7.0-savvy version will use Extend's existing scripting capabilities in conjunction with new templates for writing to System 7.0's Apple events. The combination will let users create links through which Extend can launch a spreadsheet to perform, for example, calculations for a simulation.



Under System 7.0, Imagine That!'s Extend 2.0 simulation software will be able to interact with other applications such as Claris' Resolve, shown here, for performing calculations.

Extend 2.0 also will include a library of communications links between Extend and specific applications, such as Claris Corp.'s Resolve.

Extend 2.0 also will support System 7.0's publish and subscribe capability, balloon help and TrueType fonts.

A new hierarchical interface will allow users to nest icons of subprocesses, for example, within a single, all-encompassing icon. Double-clicking that icon will reveal the component processes.

The price of the new version has not been determined, but upgrades for users of the current $495 release, Version 1.1k, will be $99.

Imagine That! Inc. is at 151 Bernal Road, Suite 5, San Jose, Calif. 95119. Phone (408) 365-0305; fax (408) 629-1251. □

Softouch Software upgrades, cuts price of Cost Management System

By Shawn Tomlinson

Portland, Ore. — An enhanced, lower-priced version of Softouch Software Inc.'s Cost Management System may help small-business people, especially in the construction industry, estimate and track their costs.

Version 3.0, which includes a FoxBASE+/Mac runtime engine, is priced at $289 for a single user, compared with $495 for the year-old Version 2.5. The new release is also available with source code and a license for unlimited distribution at one site for $995.

New features include employee and supplier databases, with memo fields for details; new labor and supplier reports in the job-costing module; and user-editable cost-adjustment descriptions. The program also adds three decimal places for specification of partial units of labor, material, services and equipment, as well as the ability to export to Peachtree Software Inc.'s atOnce! accounting system.

"Cost Management System is very fast and simple to use," said user James Erwin, president of Lacey Development of Rochester, N.Y. "It's also very reasonably priced for what it does."

But Erwin, who is involved in several businesses, said the package is designed primarily for the construction industry. He said he'd like to see the software made more useful to other small businesses.

Softouch Software is located at 5200 S.W. Macadam Ave., Suite 255, Portland, Ore. 97201. Phone (503) 241-1841; fax (503) 223-6240. □

WritePro releases writing tutorial

Scarborough, N.Y. — Mac spreadsheet jockeys are still waiting for their 1-2-3, but budding Mac fiction writers already have one up on their financial friends.

Write Pro 1/2/3/4 is a creative-writing tutorial by best-selling author Sol Stein. The WritePro Corp. software, previously available only on MS-DOS, shipped last week. The company decided to create a Mac version, Stein said, when it was inundated with calls from Mac users responding to a New York Times review that didn't mention that the program runs only on IBM PCs and compatibles.

Priced at $99.95, plus $5 shipping, the package has exercises and guidelines designed to help both novices and professionals create rounded characters and well-developed plots.

WritePro Corp. is at 43 Linden Circle, Scarborough, N.Y. 10510. Phone (914) 762-1255 or (800) 755-1124; fax (914) 762-1255. □

THINK TWICE BEFORE YOU SWITCH TO . . 7 . .

Think backup. And once you switch, think backup again.

You need Retrospect, a backup program that won an Eddy under System 6 and carries on the tradition into System 7. Retrospect is as familiar with Aliases and the Extensions folder as it is with tape drives and SyQuest cartridges. And to backup networked Macintoshes to one storage device, there's Retrospect Remote.

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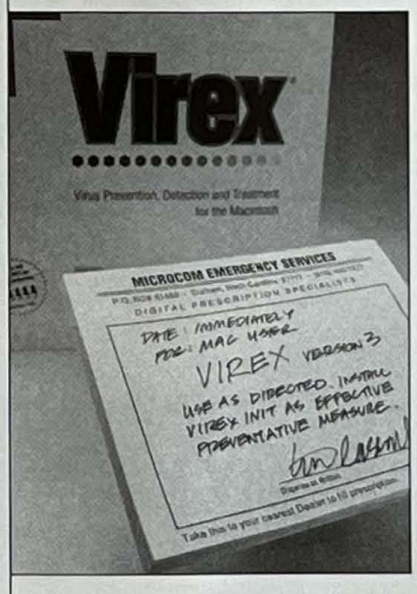
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VAMP adds IAC to McCAD system

By Rochelle Garner

Los Angeles — VAMP Inc. this week will announce two new modules as well as System 7.0-savvy upgrades to the entire McCAD Electronic Design System, its family of software products for the design and fabrication of electronic components.

The company said the revamped line will give electronics firms a way to implement concurrent engineering, a popular design methodology that emphasizes timely communication among all members of design and marketing teams. The system will use System 7.0's publish and subscribe functions and Apple events to allow the various members of a product team to share information.

A new Administrator module will provide version control and help enforce corporate design-procedure standards.

The McCAD Electronic Design System comprises eight modules for such tasks as schematic capture, printed-circuit board layout, analog simulation and auto-routing. The System 7.0-savvy versions will use Apple events for automatic passing and updating of information among open modules. Any number of modules can be open simultaneously.

Information can be passed between an auto-router and the layout editor, for example, as the tool is performing the routing or immediately after routing is completed.

Updates for three of the McCAD modules — Schematics, Schematics DS (digital signal) and the PCB-ST layout editor — will be available in August, the company said. Updates to the McCAD Classic SPICE, Gerber Translator, Gerber View, Tracker and Trailblazer auto-router modules are expected by the end of the year.

Prices for the upgrades have not been determined, but they will be higher than prices for the current line of products. VAMP said it will continue to offer the existing product series as well. Prices of current modules range from $175 for the translator to $4,995 for the high-end Trailblazer auto-router.

The new modules are:

- **ECO Administrator.** Tentatively called the ECO (Engineering Change Order) Administrator, this module will provide management services to regulate who can access or change published and subscribed information and under what conditions. Engineering companies, for example, may require a certain number of designer sign-offs before marketing can publish documentation. The new administrator software will run on AppleShare and compatible servers.
- **Logic compiler.** Due this month, VAMP's McCUPL logic compiler will let users generate fuse maps of programmable logic devices, either directly onto silicon or as a mask. It is priced at $1,495.

VAMP Inc. is at 6753 Selma Ave., Los Angeles, Calif. 90028. Phone (213) 466-5533; fax (213) 466-8564. □

InterCon introduces its new line of high speed disk drives... priced at $295.00*

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InterCon introduces NFS/Share™, an easy to use Chooser device that allows users to mount NFS servers just as they would an AppleShare™ server. NFS/Share makes using your NFS server as convenient as using a local disk. Available servers are automatically listed when you "bring up" NFS/Share, and you can even set up volumes to automatically use it every time that you start your machine!

Any Macintosh computer that is attached to a TCP/IP network via a gateway or an EtherNet card is now able to store and retrieve documents from any NFS volume. NFS/Share also gives you the option of storing Macintosh applications on your mounted volume and running them from there!

NFS/Share gives you the convenience of automatic translation between UNIX and Macintosh text files, giving you the means to edit UNIX test files with any Macintosh text editor and Macintosh text files with any UNIX text editor. With NFS/Share, the only thing you'll need to worry about... is where you'll fit the Cray on your desk.

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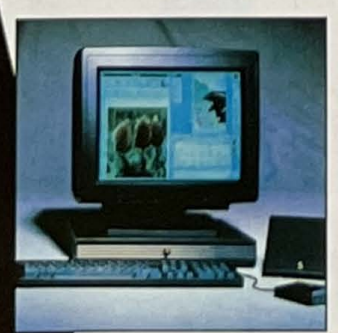
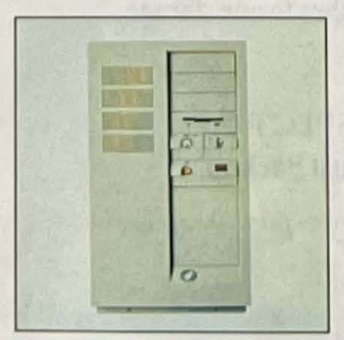
CRAY Y-MP

VAX 9000

Sun SPARC Server 390


NeXT Station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Mancini Brothers won't let deadbeats forget

By Shawn Tomlinson

San Antonio — Promising accounting software that "operates like a real business and not an automated accounting manual," DataBased is now shipping a receivables-management package called The Mancini Brothers.

Aimed at small to midsize businesses, the program supports standard receivables functions, such as recording open invoices, issuing statements, applying finance charges and sending late letters. It also provides special collection tools, including a sequence of increasingly demanding dunning notices.

But the real advantage of the package, according to DataBased, is the ease of use and built-in "guide-me" buttons, similar to System 7's balloon help.

"The pop-up guides make Mancini Brothers very easy to use," said Deborah Maslanko, director of sales for Business Link Communications Inc., a service bureau in New York. "Those guides help you step by step, and you know exactly what you're doing along the way."

The single-user version of The Mancini Brothers is priced at $395 but will rise to $595 in the fall.

Multi-user packages are available for $100 per user above the base price. An open-code version for Omnis 5 users will be $645 until fall and $845 thereafter.

DataBased is at 15 Donore Square, San Antonio, Texas 78229. Phone (512) 342-8687 or (800) 443-0180; fax (512) 340-1710. □

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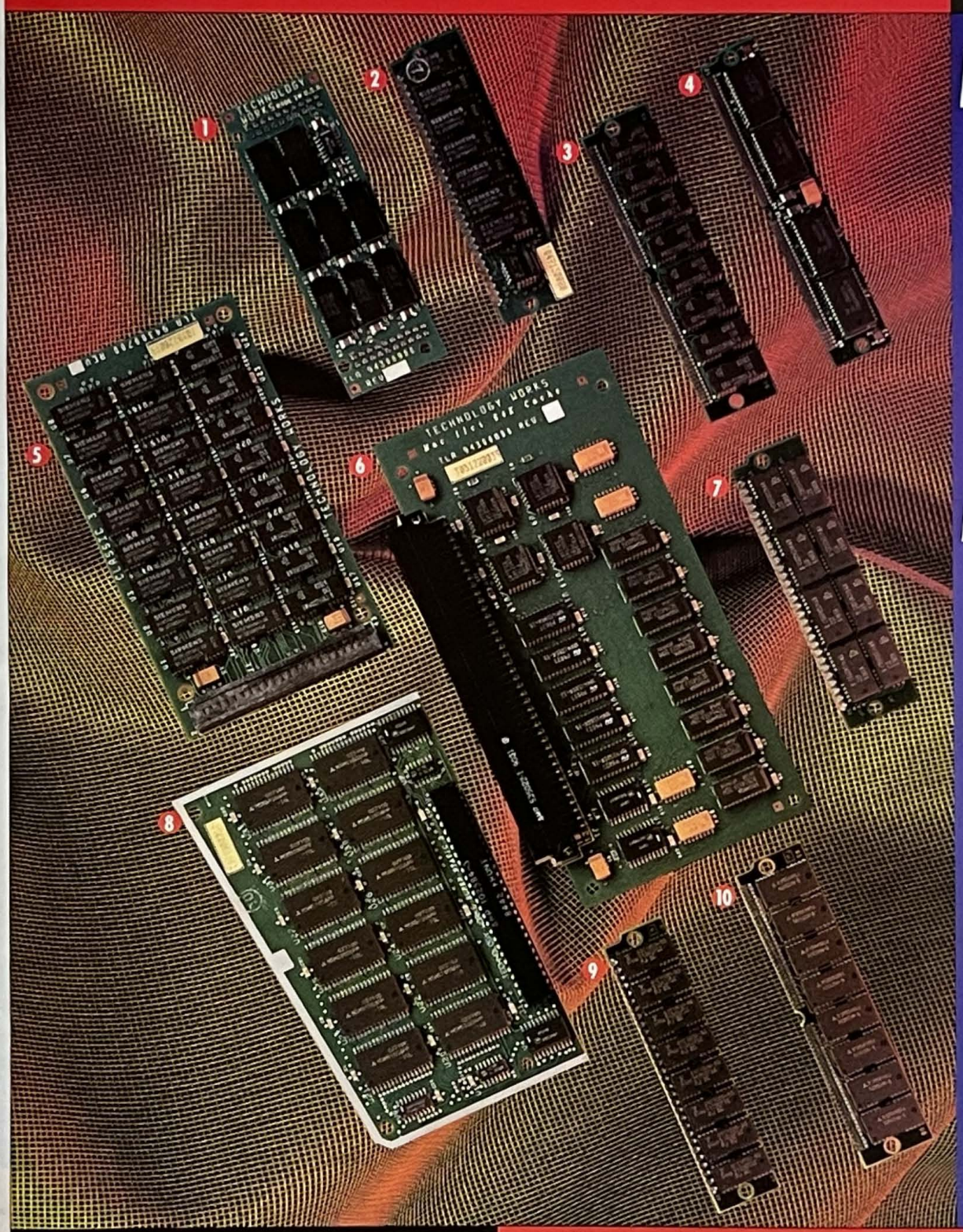

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Digit to link Macs to IBM EDI net

By Shawn Tomlinson

Silver Spring, Md. — A new product due in the third quarter from Digit Software Inc. for the first time will let Mac users exchange messages and business documents over the IBM Information Network (IBM IN) Information Exchange.

Digit's expEDIte/Mac will support the Electronic Data Interchange format, a standard that allows the exchange of purchase orders, requests for quotation and similar business documents in computer-readable form regardless of platform.

The IBM IN electronic-mail system uses a proprietary asynchronous protocol that can't be accessed with public-domain protocols such as Xmodem or Zmodem.

Digit said expEDIte/Mac will cost less than $200. The company released MacEDI, the first EDI implementation for the Mac, last fall (see MacWEEK, Feb. 12). The product supports X.12, the U.S. EDI standard, but Digit said it will add support for the international EDIFACT standard by year-end.

Digit Software Inc. is at P.O. Box 1425, Silver Spring, Md. 20915. Phone (301) 593-8952; fax (301) 593-2201. □

Blueridge puts Optix imaging system on LC for less than $10,000

By Allison de Lavenga

Flint Hill, Va. — Blueridge Technologies Inc., developer of Optix document-imaging software, now is offering a turnkey imaging system priced at less than $10,000, as well as an Arabic version of its software.

▸ **Optix Pilot** was designed to give users a complete document-imaging system at a fraction of the cost of comparable systems for other microcomputer platforms, according to the company.

The $9,995 system includes Optix software, a Mac LC, a Ricoh IS50 scanner with a 6-page-per-minute automatic document feeder, a Sony rewriteable optical drive and a PLP II laser-quality printer from GCC Technologies Inc.

Like the Optix software for single users, Optix Pilot features include a built-in database that can index more than a million documents; fast compression and decompression ratios; drawing tools for editing and annotating images; and an upgrade path to Blueridge's Optix Network, a server that runs under A/UX and uses Informix Software Inc.'s SQL database.

▸ **An Arabic version of Optix** is now shipping for $695. Saudi Systems Corp. is working with Blueridge to distribute the software.

Other non-English versions of Optix are also being developed by Blueridge.

Blueridge Technologies Inc. is at P.O. Box 430, Flint Hill, Va. 22627. Phone (703) 675-3015 or fax (703) 675-3130. □

AVR boosts scanners to 600-dpi resolution

By Neil McManus

San Jose, Calif. — Advance Vision Research Inc. this week will announce that it is increasing the top resolution of its AVR 3000 series of color and gray-scale scanners from 300 dpi to 600 dpi.

The resolution upgrade is achieved through software interpolation by the scanner drivers.

Depending on the complexity of the scanned image, interpolating to higher resolutions can add as much as 15 percent to 20 percent to image processing time, according to the company.

The upgrade, available immediately, is free to owners of AVR 3000 scanners.

List prices and features of the AVR units remain the same:

▸ **AVR 3000/CL Plus** is a 24-bit-color scanner priced at $2,590.

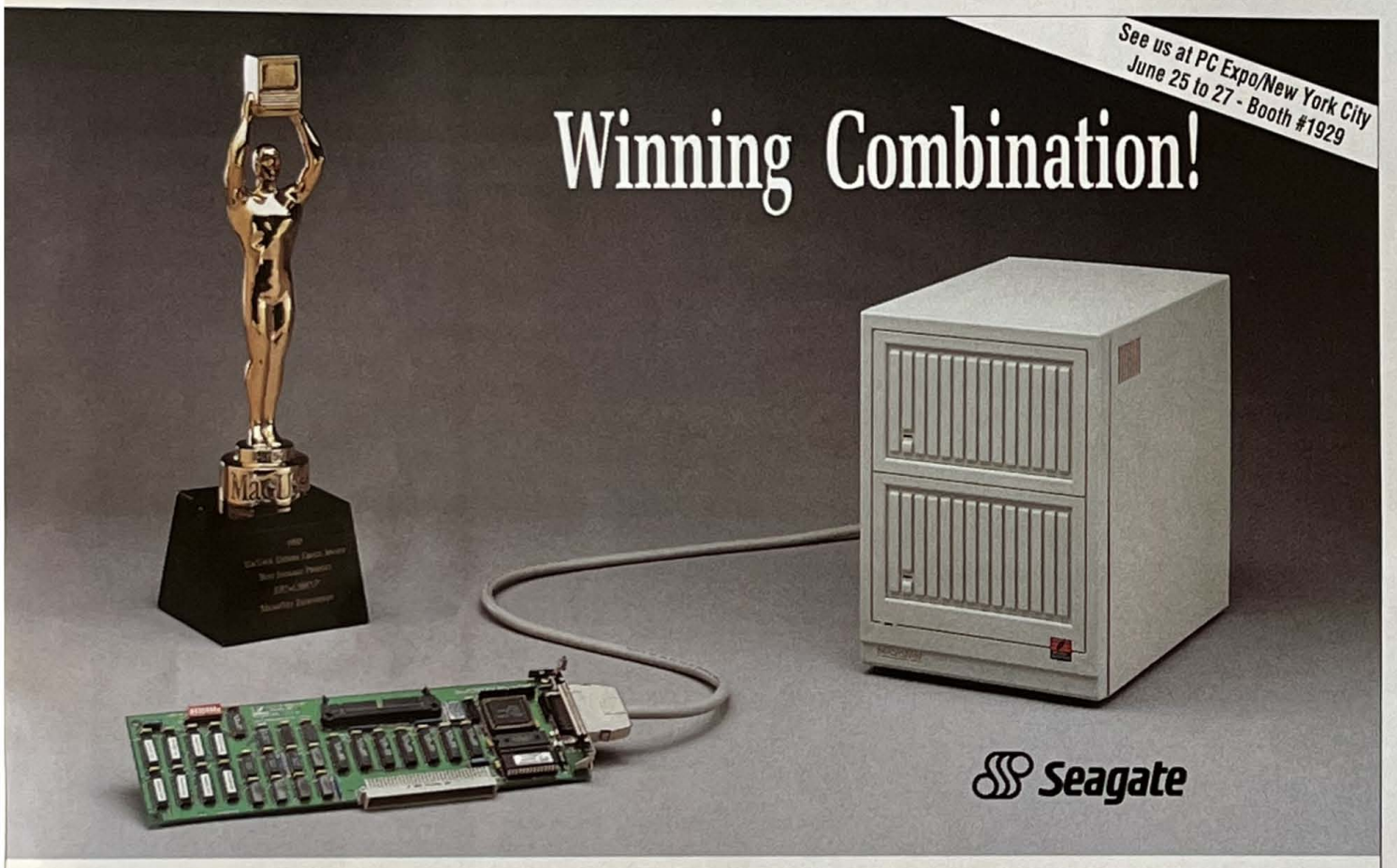
▸ **AVR 3000/GS Plus** is a $1,990 gray-scale scanner that offers 24 levels of gray.

Both are flatbed models with an image area of 8.5 by 14 inches.

They come with a SCSI interface and cable and a copy of Photoshop Limited Edition, a subset of Adobe Systems Inc.'s $895 image-editing program.

Users can upgrade to the full Photoshop for $249.

Advance Vision Research Inc. is at 2201 Qume Drive, San Jose, Calif. 95131. Phone (408) 434-1115; fax (408) 434-0968. □



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Users move to revive Reflex Plus

By Shawn Tomlinson

Baldwinsville, N.Y. — Like the fans who mobilized to keep the "Star Trek" series on TV when network executives wanted to kill it, users of Reflex Plus for the Mac are mounting a campaign to resurrect the program. But Reflex Plus, once published by Borland International Inc., has already been off the air — except for reruns — for several years, and its fans want it revived on a different channel.

The company last updated the product in 1987, when it changed the name from Reflex to Reflex Plus. A year later, Borland withdrew from the Mac market. Last month, the Reflex Plus Orphans Association, an all-volunteer user group formed last year to provide support for other users of the program, issued a public appeal to Borland to find a new home for it.

"Most of us are business owners and use Reflex in our businesses," said Fred Rushden, membership coordinator for RPOA. "Some of us have [put] thousands of hours of work into our databases, and we're willing to do a lot of work not to have to give up that work."

Rushden said Reflex is easy to use, powerful and flexible, which is why the product still has a following, estimated by the organization at 100,000 users. Citing the example of Ashton-Tate Corp., which last year sold its dBASE Mac package to a new publisher, Rushden contended that users "orphaned" by Borland want to be "adopted" by another, more committed software developer. Their hope, he said, is that another company will bring Reflex Plus up to date and offer technical support.

RPOA provides support to Reflex Plus users on CompuServe and America Online.

The Reflex Plus Orphans Association is at 3142 Beaver Brook Lane, Baldwinsville, N.Y. 13027. Phone (315) 635-7550. □

Symantec offers THINK Reference

By Andrew Gore

Cupertino, Calif. — THINK Reference, a new $99 Mac programming guide from Symantec Corp., puts the reams of information required to build Mac applications at a developer's fingertips.

The encyclopedia of system information contains data for programmers working in Symantec's THINK C and THINK Pascal, as well as Apple's Macintosh Programmer's Workshop. The program contains information from "Inside Macintosh" volumes I through V and Apple Tech notes, as well as data on fonts and other system resources, programming tips and examples. Many topics come with graphic illustrations.

THINK Reference includes multiple tables of contents and supports searches on multiple criteria. Topics are cross-referenced, and users can place up to 10 electronic bookmarks for quick access to sections of special interest.

THINK Reference takes up a total of 3.5 Mbytes of hard disk space.

Symantec Corp. is at 10201 Torre Ave., Cupertino, Calif. 95014-2132. Phone (408) 253-9600; fax (408) 253-4092. □

Patches let THINK Pascal, C run under System 7.0

By Andrew Gore

Bedford, Mass. — Current versions of Symantec Corp.'s THINK C and THINK Pascal are not compatible with System 7.0, but the company is distributing user-installable patches and header files that make it possible to run the products on System 7 in 24-bit mode and compile 32-bit-clean applications that take full advantage of the new system.

In addition to being unable to run in System 7.0's 32-bit mode, the THINK compilers can't use virtual memory. "THINK C and THINK Pascal are not currently 32-bit clean," said Dave Neal, senior engineer for Symantec. "But the applications you build with the programming languages are 32-bit clean."

The software patches and header files for THINK C and THINK Pascal are available on AppleLink, Symantec's forum on CompuServe and the company's own bulletin board.

Symantec plans 32-bit-clean versions of both the C and Pascal products, according to Julie Bingham, the company's director of programming products. She wouldn't comment on release dates.

Developers interested in getting more information about running THINK products with System 7 can contact Symantec's languages group, which is at 135 South Road, Bedford, Mass. 01730. Phone (617) 275-4800; fax (617) 275-2124. □

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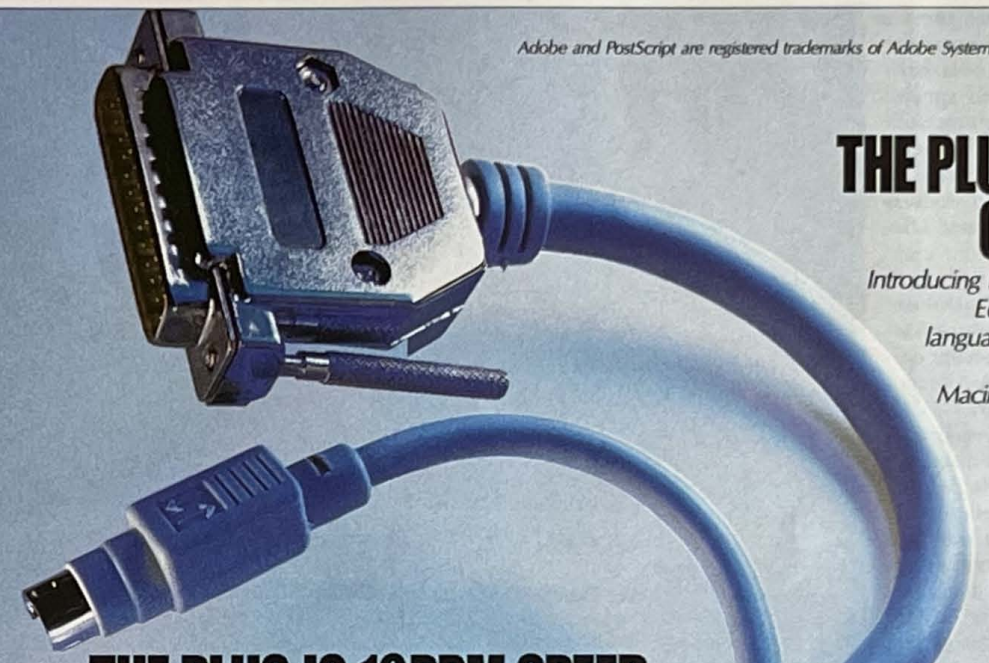

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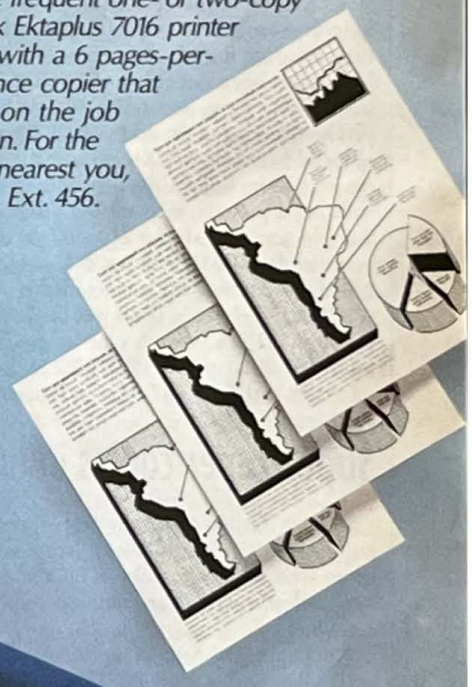

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Apple kit combines Mac and Unix tools

By Margie Wylie

Nashville, Tenn. — A new development tool kit announced by Apple last week will soon enable programmers to create Mac, Unix, X Window and hybrid applications in a single environment.

Called A/UX Developer's Tools, the kit combines A/UX-compatible versions of Apple's Mac development tools with industry-standard Unix tools and special extensions for building Unix programs with the look and feel of the Mac. The $895 package, introduced at the USENIX Technical Conference and Exhibition here last week, is scheduled to ship in August on three CD-ROM discs.

▸ **Mac tools.** The kit includes a version of the Macintosh Programmer's Workshop, Apple's standard development environment for Mac applications, which runs under the current release of A/UX Version 2.0.1. Components include the MPW shell; MPW C, C++ and Object Pascal compilers; source debugger (SADE); ResEdit resource editor; and an assembly language debugger (MacsBug).

▸ **Unix tools.** A second C compiler in the new kit, licensed from AT&T Co.'s Unix System Laboratories, is designed for the creation of applications for A/UX or the latest standard Unix, System V Release 4. Also included are the C++ Language System, based on Release 2.1 of AT&T Co.'s object-oriented development system; the full X Window System X11 Release 4 development environment; and the dbx debugger, a popular tool among Unix programmers, according to Apple.

▸ **Tools for hybrid programs.** Extensions for the ANSI C compiler and dbx will help developers create and test Unix applications wearing the Mac interface — a feat that has always been possible under A/UX but not necessarily easy, according to Jeff Benrey, product manager. In addition, a source and object library of A/UX system calls will let programmers build Unix capabilities, such as splitting a process, into an A/UX application. Sample source code for HyperCard external commands (XCMDs) that will allow stacks to call Unix functions is also included.

A/UX Developer's Tools will be distributed through APDA, which can be reached at (408) 562-3910 or (800) 282-2732 in the United States and (800) 637-0029 in Canada. □

Foundation offers Hypertext help

By Allison de Laveaga

Cary, N.C. — Macintosh application developers looking to add a help system to their programs can get some help of their own with new software from Foundation Solutions Inc.

EHelp, which began shipping last month, is an engine that supports context-sensitive, structured hypertext help, the company said. EHelp can be displayed as a standard modeless application window, a modal window or a pop-up note. EHelp provides a topics list and hypertext-style links between related notes and topics. Complete color, font and style capabilities are available.

Unlike other help engines, no royalty fees are attached to EHelp. EHelp's $350 price includes a perpetual license for a single application.

EHelp is being used to create a help system for EPlanner, a project-management system that is due in August from the company.

Foundation Solutions Inc. is at 2000 Regency Parkway, Suite 270, Cary, N.C. 27511. Phone (919) 481-3517; fax (919) 481-3551. □

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SuperDuper copies in bulk

Salinas, Calif. — A new high-speed disk-copying utility could make life easier for those who duplicate disks in bulk with Macintosh floppy drives or common duplication machines.

NeoConcepts' SuperDuper, which works with all Macs except the IIfx, copies four times faster than the Finder, according to the company. It can write a unique serial number on each disk and run in the background under MultiFinder or System 7.

The regular version of SuperDuper sells for $79. A version that controls Douglas Mac Disk Duplicators and Fifth Generation Systems Inc.'s Jukebox Five retails for $150; one for Mountain Computer Inc.'s duplicators is $390.

NeoConcepts can be reached at P.O. Box 6883, Salinas, Calif. 93912. Phone (408) 899-4821. □

Drive7 promises easier 7.0 updating

By Dartanyan Brown

Greenbrae, Calif. — Casa Blanca Works Inc. this month announced Drive7, a hard disk utility designed to reduce the cost and hassle of migrating to System 7.0.

Due by the end of this month, the program will feature an update button that lets users install a fully System 7.0-compatible driver with a single click, even if the drive was formatted by another utility. Many older drivers are incompatible with the new system or do not support its virtual-memory scheme, and some vendors have not yet shipped compatible updates.

Casa Blanca said its update function is capable of replacing any driver that conforms to Apple's SCSI guidelines, so long as the driver is not keyed to a specific vendor's firmware. The company is compiling a list of drivers that can be replaced without reformatting, but details are not yet available.

Other Drive7 features include partitioning, A/UX support and balloon help for users of System 6.0.x as well as 7.0.

A copy of Drive7 with a 10-user license will be priced at $39.95 until July 30, when the price will go to $59.95. □

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Casa Blanca remote LCD to keep users in the know

By Dartanyan L. Brown

Greenbrae, Calif — Mac users who can't stay at their desks soon will be able to get real-time updates from their computers via Radar 1, a remote LCD unit under development at Casa Blanca Works Inc.

Attached to the computer's serial port, the display has a 64-by-120-dot supertwist screen that can display graphics or eight 20-character lines of text. The screen sits in a 5-by-5-inch sloping case designed for easy viewing by sitting or standing users.

Custom software is required, and Casa Blanca initially will market the Radar 1 on an OEM basis and through value-added resellers. The unit, which is expected to ship next month, is designed primarily for use in vertical markets such as factory automation, investment management and medical monitoring. A stockbroker could use it, for example, to get a real-time reading calculated with a proprietary formula from changing price data, the company said.

Prices are expected to be less than $300 per unit, depending on quantity. Casa Blanca said it will offer custom development assistance and plans to release off-the-shelf office-management applications of the technology this summer.

Casa Blanca Works Inc. is at 148 Bon Air Center, Greenbrae, Calif. 94904. Phone (415) 461-2227; fax (415) 461-2249. □

InterPlot offers scientists point-and-click analysis

By Raines Cohen

Silver Spring, Md. — Scientific Visions last month released InterPlot, an application that lets users extract data from scientific graphs by clicking and dragging.

The $99.95 program features analysis tools that dynamically show calculated function values as the user moves the mouse along a selected curve.

The approach, the company said, makes data exploration both faster and more interactive than traditional analysis software, which performs calculations on entire data sets.

InterPlot's on-screen palette includes derivative, standard-deviation and integration tools. The program also supports linear and non-linear curve fitting, with user-defined fit functions.

Built-in functions include Bessel and error and gamma functions. Users can define custom functions, based on the built-in ones, to calculate new curves.

The program automatically propagates error values, when present, through all calculations, so the accuracy of the final result can be determined easily. Error bars can be displayed on charts.

PICT graphics can be imported, and the program provides a palette of MacDraw-like drawing tools for chart annotation. Data can be entered in the program or imported from text files.

InterPlot comes with a 60-day money-back guarantee. A demo version is available from the company for $5.

Scientific Visions is at P.O. Box 1971, Silver Spring, Md. 20915. Phone (301) 593-0317. □

Two companies give Mac monitors some new shades

By Allison de Laveaga

Santa Rosa, Calif. — Two manufacturers of add-on display screen filters recently extended their product lines to the newest members of the Mac family.

▸ **Kensington Microware Ltd.** last week began shipping the Anti-Glare Filter for the Mac Classic. Versions for Apple's 12-inch monochrome and color displays, as well as for Radius Inc.'s Pivot Display, are due later this month.

The filters, made of optical-quality glass with several layers of anti-reflective and scratch-resistant ceramic coating, reduce glare by as much as 96 percent and improve screen contrast and clarity by as much as 20 percent, according to the company. The filters slip over the top of the monitor.

The Classic filter is $69.95, the model for Apple's 12-inch displays is $99.95, and the filter for the Pivot is $199.95. The company also offers filters for a variety of other Apple and third-party Mac displays. Kensington claims no reduction of radiation with its filters.

▸ **Optical Coating Laboratory Inc.** last month released two anti-glare and anti-radiation filters for the Mac Classic as well as other compact Macs. Made of tempered or laminated glass and an anti-reflection coating, the MacGlare/Guard Plus and MacGlare/Guard E-shield both eliminate as much as 99 percent of VDT glare, the company said.

What differentiates the two models is their effectiveness against extremely low frequency (ELF) and very low frequency (VLF) electrical emission. The $89.95 MacGlare/Guard Plus cuts electrical-field radiation by 98 percent, while the $139.95 E-shield model eliminates 99.99 percent of the electrical-field radiation, according to the company. OCLI also makes Glare/Guard filters for larger Macs.

Neither company's filters affect ELF or VLF magnetic-field radiation, the main focus of recent controversy about the possible health hazards of VDTs. OCLI cited an independent study showing that it is not possible to block magnetic fields with transparent material.

Kensington Microware Ltd. is at 2855 Campus Drive, San Mateo, Calif. 94403. Phone (415) 572-2700 or (800) 535-4242; fax (415) 572-9675.

Optical Coating Laboratory Inc. is at 2789 Northpoint Parkway, Santa Rosa, Calif. 95407-7397. Phone (707) 545-6440 or (800) 545-6254; fax (707) 525-7410. □

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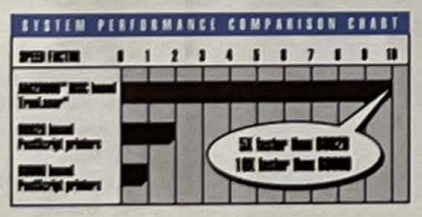

TrueLaser=TrueType.

The TrueLaser printer is the first printer to come bundled with 35 resident TrueType fonts, Apple's new font standard. TrueLaser will work with every member of your Adobe font library and beautifully publishes PostScript Type 1 and Type 3 fonts. It is also ready and waiting for both Windows 3.1 and Macintosh System 7.0.

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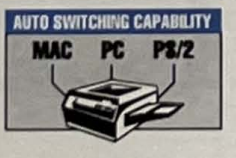

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User group of scientists, engineers calls for papers

By Rochelle Garner

Worcester, Mass. — MacSciTech, an organization recently chartered to disseminate information about using the Mac for scientific and engineering applications, this month issued a call for technical papers to be read at a technical conference scheduled for next January.

MacSciTech was announced in April by Apple and the Consortium for Laboratory & Industrial Applications for the Macintosh, an organization of developers of technical products for the Mac (see MacWEEK, April 9).

The conference, called Scientific & Engineering Applications of the Macintosh (SEAM '92), will be held Jan. 15-17 in San Francisco. Suggested topics for conference papers include the Mac and data acquisition, imaging, data analysis, data visualization, CAD/CAM and computer-aided engineering, and specific disciplines such as chemistry and molecular biology.

Membership in MacSciTech is not required for submissions. The deadline for submitting presentation titles is Aug. 1; 200-word abstracts must be submitted by Oct. 1. Presentation titles should describe the topic and include the author's name, affiliation, return address and any electronic-mail address. Abstracts should be accompanied by a signed copyright transfer form and speakers should indicate whether their talk will require visual aids.

MacSciTech requests that titles and abstracts be submitted by E-mail or by disk, although hard copy will be accepted.

Regular MacSciTech memberships are $25; student membership fees are $15. The cost of the technical conference has not been determined.

Titles and abstracts should be sent to SEAM '92, MacSciTech, 49 Midgley Lane, Worcester Mass. 01604. E-mail: scitech@ra.nrl.navy.mil on the Internet or SciTechMac on America Online. Phone (508) 755-5242; fax (508) 795-1636. □

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O. Accountant
P. Representative
Z. Other (please specify) _____

3 Your department/function at this location:

(Select one only.) Write Answer Here ➨ ☐

A. Engineering/Systems Engineering
B. Research & Development
C. Communications/Publishing/Public Relations
D. Art/Creative Design
E. MIS/DP/Information Systems
F. Manufacturing/Operations/Production
G. Sales/Marketing
H. Administration/Management/Personnel
I. Accounting/Finance
J. Education/Training
K. Science
L. Consulting
Z. Other (please specify) _____

4 Are there Macintoshes or other PCs listed below owned and/or planned for purchase within 1 year at this location?

☐ Yes ☐ No

			Currently Owned (Quantity)	Plan to Buy (0-12 Months) (Quantity)
MODULAR	68030 Macintosh IIfx / IIci / IIcx / IIx	3		
	68030 Macintosh IIsi	4		
	68020 Macintosh II / LC	5		
	68000 Macintosh Portable	6		
COMPACT	68030 Macintosh SE/30	7		
	68000 Macintosh Classic	8		
	68000 Macintosh SE / Plus / 512	9		
OTHER	IBM/Compatible Micro	10		
	Workstation (e.g. Apollo, Sun)	11		

Please remember to sign and date the form.
All questions must be answered completely, and be sure to provide specific numbers where requested.
The publisher reserves the right to limit the number of free subscriptions. Thank you.

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5 If your firm's primary business at this location is retailing, reselling or consulting, how many Macintoshes are sold per year?

(Answer one only.)

A. Retailer: sold per year _____ (specify quantity)
B. Reseller: resold per year _____ (specify quantity)
C. Consultant: purchased by your clients through your firm's recommendations per year _____ (specify quantity)
☐ D. Not Applicable

6 Please check the Mainframe(s) or Minicomputer(s) at your location:

(Check all that apply.)

☐ 01. VAX ☐ 02. IBM Mainframe ☐ 03. IBM Minicomputer ☐ 04. Other ☐ 09. None

7 Do you purchase, recommend, specify or approve any of the Macintosh/Compatible products listed below?

☐ Yes (If yes, check all that apply): ☐ No

Computers
☐ 01. Macintoshes
☐ 02. Workstations
☐ 03. Minis, Mainframes

Connectivity
☐ 10. Local Area Networks
☐ 11. Modems
☐ 12. Micro/Mini/Mainframe Links
☐ 13. Communication Software

Peripheral Equipment
☐ 20. Laser Printers
☐ 21. Color Printers
☐ 22. Color Monitors
☐ 23. Hard Disks
☐ 24. Backup Systems
☐ 26. Scanners
☐ 27. Input Devices
☐ 28. Removable Storage

Add-In Boards
☐ 40. Memory Boards
☐ 41. Graphic Boards
☐ 43. Ethernet Boards
☐ 44. Video Boards

Software
☐ 50. CAD/CAM
☐ 51. Graphics
☐ 52. Desktop Publishing/Fonts
☐ 53. Desktop Presentation
☐ 54. Database
☐ 55. Programming
☐ 56. Accounting, Payroll
☐ 57. Spreadsheets
☐ 59. Project Management
☐ 60. Word Processing
☐ 61. Utilities
☐ 62. Multimedia

8 If you answered yes to the above computer products, for how many Macintoshes do you have this involvement?

(Select one only.) Write Answer Here ➨ ☐

01. 1000+
02. 500-999
03. 100-499
04. 50-99
05. 20-49
06. 10-19
07. 1-9
09. None

9 Please indicate the communications capabilities that the Macintoshes at your location have:

(Check all that apply.)

☐ 01. Local Area Network
☐ 02. Communicate with corporate workstations, mini or mainframe computers
☐ 03. Communicate with remote mini or mainframe computers
☐ 04. Communicate via modem
☐ 05. Voice/Data
☐ 09. Other (please specify)

10 Indicate how many employees there are in your entire company:

(Select one only.) Write Answer Here ➨ ☐

01. 1000 or more 02. 100-999 03. Under 100

11 Indicate an additional individual at this location who might qualify for a FREE subscription to MacWEEK:

Name _____

Title _____ Dept. _____

Your Signature _____

Title _____ Date ___/___/___

PLEASE BE SURE THAT ALL QUESTIONS ARE ANSWERED.

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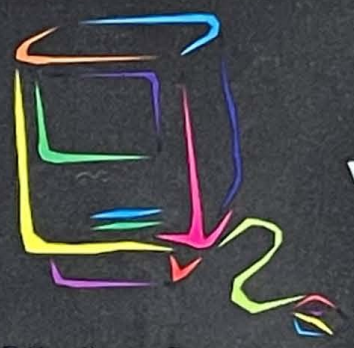
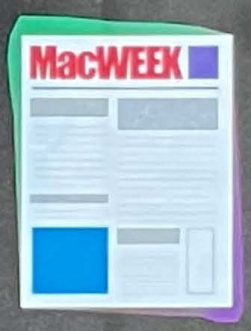
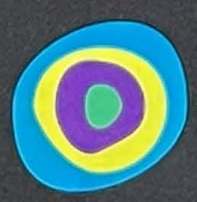
Imagine a day without reading the newspaper . Or watching the news on TV . Dependency on the news has become a critical element in our lives. Strength and power of knowledge gives us an edge in our business life, our personal life and our financial stability .

At MacWEEK, we believe in this need to keep people informed.

In this rapidly changing Macintosh  world, corporate volume buyers need to stay current on Macintosh news, product information, mergers and acquisitions, industry trends and developing technology.

Their jobs depend on it. That's why we deliver MacWEEK 

forty-two times 42X a year. And that's why 75,000 highly targeted  Macintosh Volume Buyers count on the only newspaper in the Macintosh market week after week: MacWEEK.

Authenticator 2.0 limits access to Macs, printers

By Mitch Ratcliffe

Arlington, Mass. — A software package originally developed to help control access to Macs and printers at Harvard University's Graduate School of Design is now available on a commercial basis to Mac managers at laboratories, libraries, service bureaus and other open environments.

Eclectic Associates Inc.'s Authenticator 2.0 includes an extension that limits access to a protected Mac to users who enter a valid user name and password. The software also blanks and locks the screen after a specified interval of inactivity or when the user clicks on a designated on-screen hot spot.

An Administrator application lets the network manager maintain the password list, customize the message that Authenticator presents to users, configure the screen saver and set other parameters.

In addition, Authenticator 2.0 maintains a log of Mac usage, as well as a separate file that records information about each print job. With the Administrator program, the network manager can merge logs from protected workstations into a tab-delimited ASCII file that can be exported to databases and spreadsheets.

The package is priced at $120 per machine, with volume and educational discounts available.

Harvard's design school commissioned the program more than two years ago to help cut the costs of laser printing, according to Erin Hoffer, director of computer resources. Because the original version of Authenticator, still running on the school's computers, tracks only Mac, and not printer, usage, charges were based on machine time. The new version, to be installed this summer, will make it possible to charge for pages actually printed, Hoffer said.

Version 2.0 leaves hard disks unprotected when users boot from a floppy disk, according to David Kovar, president of Eclectic Associates. But an upgrade, to be distributed to registered users at cost this fall, will close this loophole, he said.

Another enhancement, also due this fall, is support for Sun Microsystems Inc.'s Network Information Service, an authentication-management protocol. That version will allow managers on multiplatform networks to administer Authenticator from Unix systems. Yet another upgrade, now in the planning stage, will let administrators set quotas on individual users' printing with an upgrade scheduled to ship at the end of the year.

Authenticator runs under System 6.0.5 and later, including System 7.0, the company said.

Eclectic Associates Inc. is at 266 Broadway, Arlington, Mass. 02174. Phone (617) 643-3373 or (800) 253-3367. □

Macintosh network managers get their due

A Conference Devoted To Macintosh Connectivity Issues

Macintosh networks have grown beyond the plug 'n' play approach and the Mac is being integrated into many diverse environments. Unfortunately, the informational resources available to Macintosh/AppleTalk network managers have not kept pace with the revolution. Until now.

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Mactivity '91: The Macintosh Connectivity Conference is a three-day technical conference for Macintosh/AppleTalk networking professionals. You'll choose from over 50 technical sessions including System 7.0's effect on networks, Wide Area Networking with AppleTalk, Apple's Direction in Management Protocol Implementations, Mac/VAX integration, and much more.

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Newer offers trade-in for high-density RAM

By Dartanyan Brown

Wichita, Kan. — If you've already got 20 or 32 Mbytes of RAM and your appetite for memory still isn't satisfied, Newer Technology has a solution for you.

The company, which has been a pioneer in bringing high-density memory to the Mac, said it will offer its 8-Mbyte and 16-Mbyte SIMMs (single in-line memory modules) in trade for 4-Mbyte or 8-Mbyte modules.

Since RAM prices change on a daily basis, the company said, customers must call in advance to obtain an up-to-date quote. Newer will then ship a completed and prepaid Federal Express form and envelope to the customer. Upon return of the customer's SIMMs, Newer will test them for functionality and update the customer's account for the quoted trade-in amount. Credit card and c.o.d. customers will receive a check for the trade-in amount.

"Typically, if a customer has a 4-Mbyte SIMM that costs $400, we're giving about 50 percent back in trade-in," said Gene Hildebrand, Newer director of sales. "We are seeing a lot of Radius Rocket users, as well as users involved with color pre-press, desktop publishing and high-end graphics."

Several memory-hungry graphics applications, including Adobe Photoshop and Letraset's ColorStudio, are already 32-bit clean, so users can take advantage of memory beyond the Mac's old 8-Mbyte limit by running System 7.0 or Optima, a Connectix utility that Newer distributes with its SIMMs.

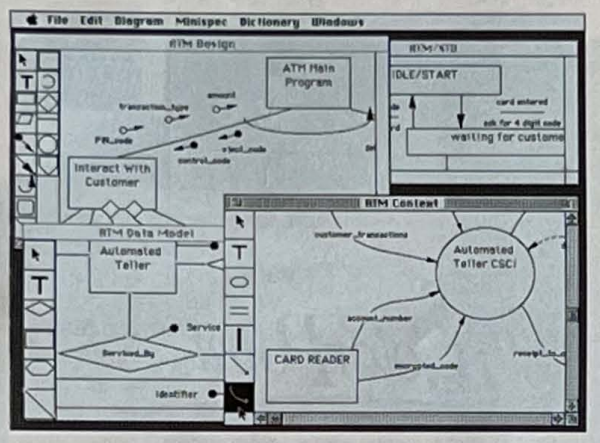
Newer Technology is at 7803 E. Osie, Suite 105, Wichita, Kan. 67207. Phone (316) 685-4904 or (800) 678-3726; fax (316) 685-9368. □

Iconix CASE tool links platforms

By Mitch Ratcliffe

Santa Monica, Calif. — Iconix Software Engineering Inc. is shipping an upgraded computer-aided software and engineering tool that supports simultaneous access by users working on Macs, IBM PCs and compatibles, and Unix workstations.

FreeFlow 4.0.1, priced at $995, is a structured-analysis tool that serves as a front end for Iconix's PowerTools, a suite of nine integrated CASE tools. FreeFlow uses the DeMarco analysis method for developing data and control flow diagrams that serve as the foundation for software-engineering projects.



Iconix Software Engineering's FreeFlow links Macintosh, Windows 3.0 and Unix users working together on software-engineering projects.

Earlier this year, Iconix released versions of FreeFlow for Windows 3.0 and X Window, which can share files with Version 4.0.1 for the Mac. Users have simultaneous access to FreeFlow files from all three platforms over any network that implements AFP (AppleTalk Filing Protocol), but only one user can write to a file during a multiplatform support (MPS) session.

"We use FreeFlow to analyze the software requirements of the Long Bow Apache helicopter," said Ernie Corrall, an engineer with the McDonnell-Douglas Helicopter Co. in Mesa, Ariz. "FreeFlow 4.0.1 has added drawing tools that simplify revisions to curves, more data-dictionary capacity and additional fields for structure charting. It's been working really well."

The PowerTools suite also includes FastTask, a states diagramming module; DataModeler, for entity-relationships charting; QuickChart, a Yourdon method structure charting module; SmartChart, a structure charts- and language-sensitive model editor; PowerPDL, a pseudocode and document generator; ASCII Bridge, a module that handles data import, export and merges; CoCoPro, a cost-estimation module; and AdaFlow, for projects in the U.S. government-mandated Ada language.

The PowerTools modules are $995, except CoCoPro, which is $495, and AdaFlow, which is $1,995. All nine modules will have multiplatform support during the next year, according to Hunter Deane, Iconix vice president.

"We believe the Mac is the best hardware and operating system platform for software engineering," Deane said, adding that MPS is crucial to converting developers, who have traditionally worked with DOS applications.

Data created by other Mac PowerTools modules is updated automatically in the FreeFlow dictionary, which is available to PC and Unix users.

The Macintosh modules are System 7.0-compatible, although publish and subscribe and Apple events are not yet supported, the company said. The programs also run under A/UX.

Iconix Software Engineering Inc. is at 2800 28th St., Suite 320, Santa Monica, Calif. 90405. Phone (213) 458-0092; fax (213) 396-3454. □

UniDisc announces new CD-ROM offerings

By Allison de Laveaga

Soquel, Calif. — UniDisc Inc. has announced a Mac version of The CD-ROM Directory on Disc and a new version of The Guinness Disc of Records, both recent CD-ROM releases.

The $149 CD-ROM directory, which will be available next month, contains information on 1,500 CD-ROM and multimedia titles and almost 2,000 companies and CD-ROM products. KAware2 Retrieval System software allows users to perform complex searches, including limiting their searches to Macintosh products. A DOS-compatible version of The CD-ROM Directory on Disc started shipping in February.

Two 1991 versions of The Guinness Disc of Records will be released this summer, according to the company. UniDisc, which recently acquired the rights to develop and market the Guinness disc, said it has made several changes to the 1990 version, the first CD-ROM version of the book. Changes include improved searching methods and added pictures, text and sound. For example, an entry listing the longest words in 12 languages is now accompanied by sound.

The Guinness Disc of Records, including text and pictures but no sound, will be priced at $99; The Guinness Multimedia Disc of Records, which includes sound, will be $149.

UniDisc Inc. is at 3941 Cherryvale Ave., Suite 1, Soquel, Calif. 95073. Phone (408) 464-0707; fax (408) 464-0187. □

CD-ROMs focus on African countries

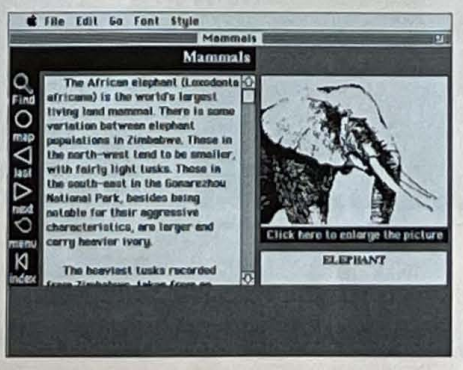
By Allison de Laveaga

Golden, Colo. — Africa is the destination to which two new $99 CD-ROM discs from CD ROM Inc. will take you.

Svinga, now shipping, is a HyperCard-based educational disc about Zimbabwe. It contains 3,000 pages of text and more than 1,000 maps, photos and drawings culled from the Tabex Encyclopedia of Zimbabwe. Information on Zimbabwe's agriculture, animals, arts, culture, geography, geology and history are included.

Another not-yet-named disc, due in August, will focus on southern Africa. Aimed at business travelers and tourists, the disc will include information on hotels, car-rental agencies, historical sites and maps for 11 southern African countries.

CD ROM Inc. is at 1667 Cole Blvd., Suite 400, Golden, Colo. 80401. Phone (303) 231-9373; fax (303) 231-9581. □


File Edit Go Font Style
Mammals
Mammals
The African elephant (Loxodonta africana) is the world's largest living land mammal. There is some variation between elephant populations in Zimbabwe. Those in the north-west tend to be smaller, with fairly light tusks. Those in the south-east in the Gonarezhou National Park, besides being notable for their aggressive characteristics, are larger and carry heavier ivory.
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Svinga, a HyperCard-based educational disc, is one of two new CD-ROM discs about African countries.

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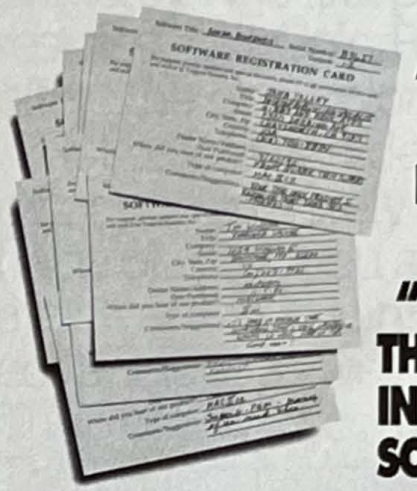

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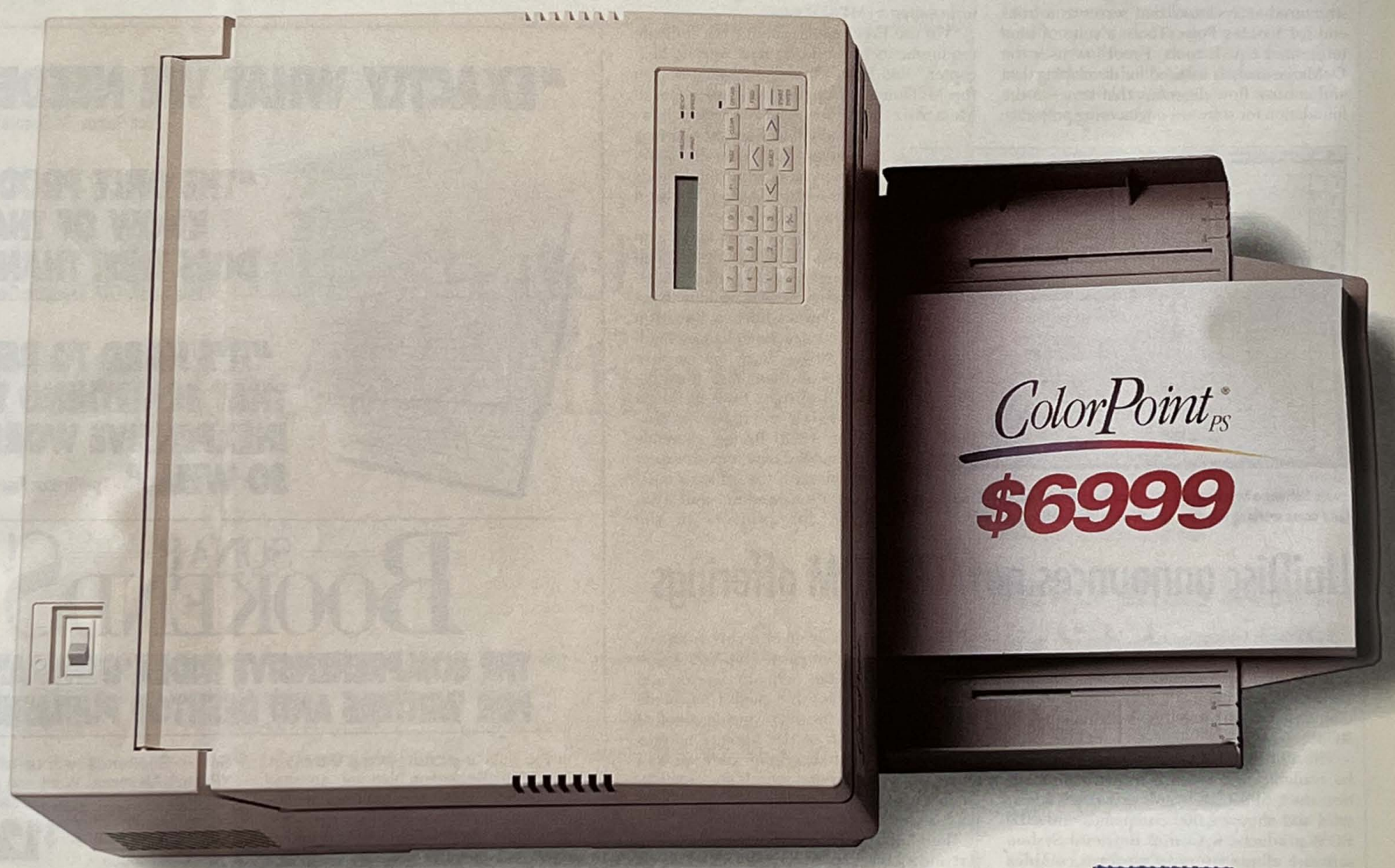
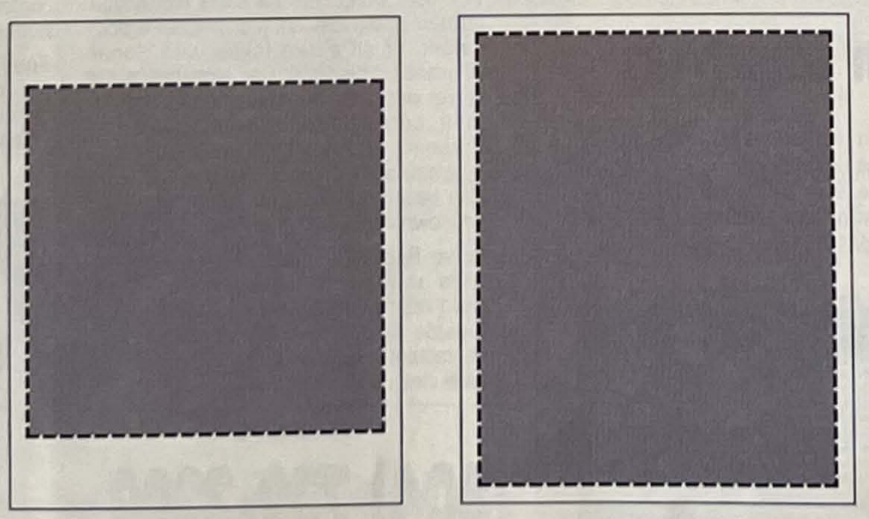


Yes, the ColorPoint offers top-notch color. It also offers superior performance in other respects. But the best news of all is the price—$6,999 for the A (letter) size and $9,999 for the B (tabloid) size.



ColorPoint is PANTONE* certified. So it simulates PANTONE colors and greatly simplifies color proofing.

ColorPoint's unique roll-feed, double-cut technology gives you the biggest image size of any comparable printer. Delivered on perfectly trimmed and finished pages. And this same technology also assures you perfect registration every time.

*Pantone, Inc's check-standard trademark for color reproduction and color reproduction materials. All brand and product names appearing in this ad are registered trademarks or trademarks of their respective holders. Intel is a registered trademark of Intel Corporation. ColorPoint is a trademark of Seiko Instruments USA, Inc. ©1991 Seiko Instruments.

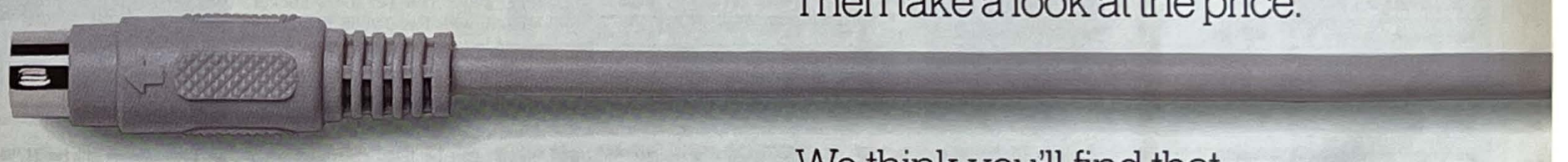
;ween the best color printer
s little to do with color.

ColorPoint is 100% Adobe PostScript language compatible, thanks to the PhoenixPage interpreter. From graphics to fonts, what you get out of the printer is faithful to what you sent it. What's more, PhoenixPage's advanced screening techniques produce smoother shading and less grainy images. ColorPoint also supports industry standard downloadable typefaces such as Adobe Type 1 fonts—including hints.

Obviously, color is critical. It's why you're looking at color printers in the first place. So rest assured, ColorPoint PS offers the best color around.

But before you decide on a color printer purely on the basis of color, you should take a look at ColorPoint's other advantages as well. The speed. The PostScript compatibility. The perfect registration. The ability to print a full page, both in A and B sizes—even in transparency form.

Then take a look at the price.

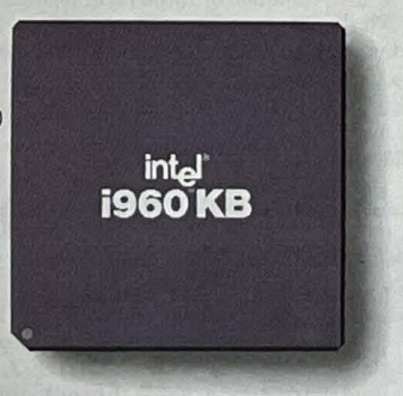


Five communication ports—parallel, serial, AppleTalk and two SCSI ports—make it easy to connect ColorPoint to Mac, PC, workstation or larger computers. And ColorPoint is easy to share because it will automatically poll the ports, so you don't have to tell it what interface you're using.

We think you'll find that deciding between ColorPoint and second best is a black and white decision.

To find out more, give us a call at 1-800-873-4561 and ask for department SI-21.

ColorPoint includes an Intel® 80960 embedded RISC-based processor that speeds up image-processing time. So you not only get superior 300 dpi quality, you get it as much as 60% faster.



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Fax users face the 7.0 challenge

Many fax modems need new software

By Nathalie Welch

San Francisco — Mac users who depend on their fax modems to reach clients and contacts should check with their vendors before jumping to take advantage of System 7.0.

Software for many popular fax modems proved incompatible with the new operating system. In many cases, the companies said, the problem was simply that the System 7.0 installer moves Chooser drivers and control panels to new subfolders for which their software was not designed.

But timing problems associated with System 7.0's virtual-memory feature can be even more serious. System 7.0 assigns memory in a hierarchical manner. If another application is opened that takes higher precedence, background processing stops. By the time the fax-modem software regains control, a connection may have been dropped, resulting in lost incoming calls or outgoing data.

Most fax-modem vendors have updated their software to correct these problems, but some have not.

Macronix Inc., a modem company based in San Jose, Calif., has no immediate plans to update its product to System 7.0 because of the complexity of the issues surrounding the new system. The company released its first Mac product, the MaxLite/M for the Mac Portable, in late 1990.

"It will be more than five or six months before we can even think of offering an upgrade [for] System 7.0 compatibility," said Clement Lee, the company's general manager.

But even the fax modems that let users send faxes while running System 7.0 do not yet take advantage of any of the new operating system's features.

Fax-modem software that supports Apple events could let users fax automatically from other applications, such as word processors, or invoke an optical character recognition application to convert a fax document into workable text. □

System 7 upgrades for fax-modem products

Company	Fax modem(s)	Current version	7.0 compatible	Upcoming version	Availability
PSI Integration Inc.	COMport, COMport 5/42	2.0	Yes	None	n/a
Global Village Communication Inc.	TelePort 9600	1.06	Yes	None	n/a
Applied Engineering Inc.	DataLink/Mac, Mac Portable, Express, LC	AE Send-Fax 2.1.1	Yes	AE Send-Fax 2.2	Late June
Dove Computer Corp.	DoveFax, DoveFax+	FaxManager 1.1.1	No	FaxManager 2.0	July
Cypress Research Corp.	FaxPro	FaxPro 1.0	No	FaxPro 2.0	August
Micro Electronic Technologies Inc.	MET 9624PF	Smith Micro Software Inc.'s Quick Link II 1.1.5	Yes	None	n/a
Circuit Research	FlexFax	Solutions Inc.'s BackFax 1.5.1	Yes	BackFax 2.0	Mid-July
Macronix Inc.	MaxLite/M	1.0	No	None	n/a
Orchid Technology Inc.	OrchidFAX LT, OrchidFAX	Solutions Inc.'s BackFax 1.5.1	Yes	BackFax 2.0	Mid-July
Prometheus Products Inc.	ProModem Ultima, 9600M Plus, 24/96MSR, TravelModem, 24/96MiniFax	MacFax 2.0.4	Yes	None	n/a
Abaton	InterFax 24/96	InterFax 1.2.4	No	InterFax 1.3	Late June

Farallon offers users Timbuktu 4.0 Screen Test

By Margie Wylie

Emeryville, Calif. — Farallon Computing Inc. last week began offering a free "try before you buy" copy of Timbuktu 4.0, the company's $195 color screen-sharing and file transfer program.

Available free on America Online, AppleLink and CompuServe, Timbuktu 4.0 Screen Test lets up to three Mac users on the same network zone try out the utility's new capabilities (see MacWEEK, April 30). Copies are also available directly from Farallon.

Farallon hopes its free trial version of Timbuktu 4.0 will tempt users to try out the upgrade's new color features, such as Clipboard exchange.

Timbuktu 4.0 not only lets users share color screens but allows them to exchange color images by sharing their Mac's Clipboards. It also will transfer files in the background, and it works with System 7.0.

The fully functioning trial software works for seven days before it "self destructs."

Farallon Computing Inc. is at 2000 Powell St., Suite 600, Emeryville, Calif. 94608. Phone (415) 596-9100 or (800) 642-2026; fax (415) 596-9020. □

New token-ring card from h-three promises relief from net jitters

By Cate Corcoran

Morrisville, N.C. — Last week h-three Systems Corp. delivered a token-ring card for the Mac that works with phone wires and operates at both 4 and 16 Mbps.

Based on a new chip set from Texas Instruments Inc. designed to eliminate problems associated with switchable token-ring cards, the $995 MacRing NB 16/4 lets Mac users on token ring run at higher speeds without the network jitter and routing problems experienced in the past.

The card's busmaster technology offloads some functions from the machine's CPU to speed overall system performance, according to the company.

Beta testers at North Carolina State University here will use the MacRing NB 16/4 with Novell Inc.'s new NetWare v3.11 to connect Macs to the university's large DOS-based token-ring network.

"Since we got into token ring before 16-Mbit [was possible], we have some 4-Mbit rings, so 16/4 is important to us," said Brian Kemerait, information center manager at the university. Card speed can be set through hardware or software, according to h-three.

The card ships with configuration and diagnostic software that supports System 7, including AppleTalk Phase 2 routing and balloon help. Current owners of the 4-Mbps-only MacRing NB can get the new System 7.0 driver for $25.

h-three Systems Corp. is at 3000 Aerial Center Parkway, Morrisville, N.C. 27560. Phone (919) 481-9505 or (800) 622-7464; fax (919) 481-9616. □

Ven-Tel ships Pocket Modem

By Nathalie Welch

San Jose, Calif. — The heaviest thing about Ven-Tel Inc.'s Pocket Modem with Fax 24/96S MAC, released last week, might be its name.

The Pocket Modem with Fax 24/96S MAC weighs in at only 6 ounces, including a battery.

Weighing in at 6 ounces, including the battery, the $189 modem sends data at speeds as high as 2,400 bps and sends faxes at 9,600 bps. It can be used with any Mac model, including the Mac Portable.

The modem operates for six continuous hours on a 9-volt battery but also comes with an AC converter for use with standard current.

Quick Link II Fax software from Smith Micro Software Inc. comes bundled with the modem, making it System 7.0 compatible. The software provides pull-down menus, a number of terminal emulators and file transfer protocols, and a scripting language for automating communications tasks.

Other features include automatic answer, background faxing, multiple fax transmission from a single copy, cover-sheet generation and conversion of graphics files to fax format.

The Pocket Modem with Fax 24/96S MAC also includes an onboard speaker that lets users monitor calls for wrong numbers and other connection problems.

Ven-Tel Inc. is at 2121 Zanker Road, San Jose, Calif. 95131. Phone (408) 436-7400 or (800) 538-5121; fax (408) 436-7451. □

Connection to printer port made E/Z

By Mitch Ratcliffe

Salt Lake City — Dayna Communications Inc. this month shipped its DaynaPORT E/Z, the first external Ethernet device to connect through the Mac's printer port.

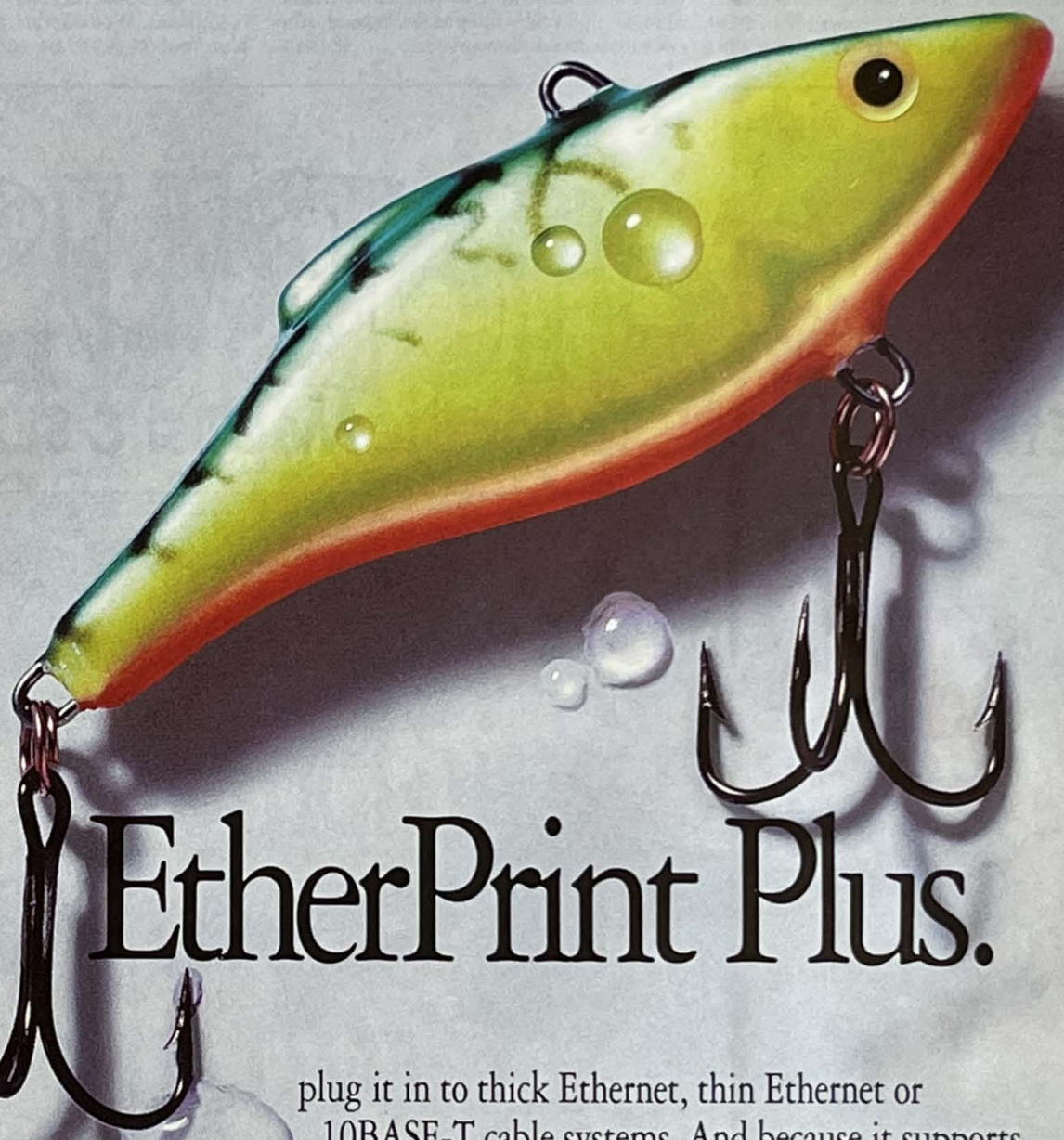
The $399 device, essentially a card in a box, lets Macs that do not have an available expansion slot plug into an Ethernet network through the Mac's printer port.

The E/Z adapter drives the serial communications chip in the printer port at speeds as high as 8 Mbps — fast enough to support Ethernet's 10-Mbps data transmission rate, according to Dayna.

The adapter comes with a 32-Kbyte RAM buffer to handle bursts of heavy network traffic.

See Dayna, Page 27

EtherPrint.



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New eXodus works without router

By Mitch Ratcliffe

Nashua, N.H. — White Pine Software Inc. last month introduced Version 3.0 of eXodus, its X Window display server for the Mac.

Available now for $295, the new version adds support for ADSP (AppleTalk Data Stream Protocol), making it possible to link LocalTalk users directly to VAS hosts via Digital Equipment Corp.'s Pathworks. Earlier versions of the software required a router to handle the translation between DECnet or TCP/IP networks and LocalTalk. New support for "rootless" windows will allow X Window windows to appear as standard Mac windows and make integration between the environments more seamless.

In addition, the new version supports:

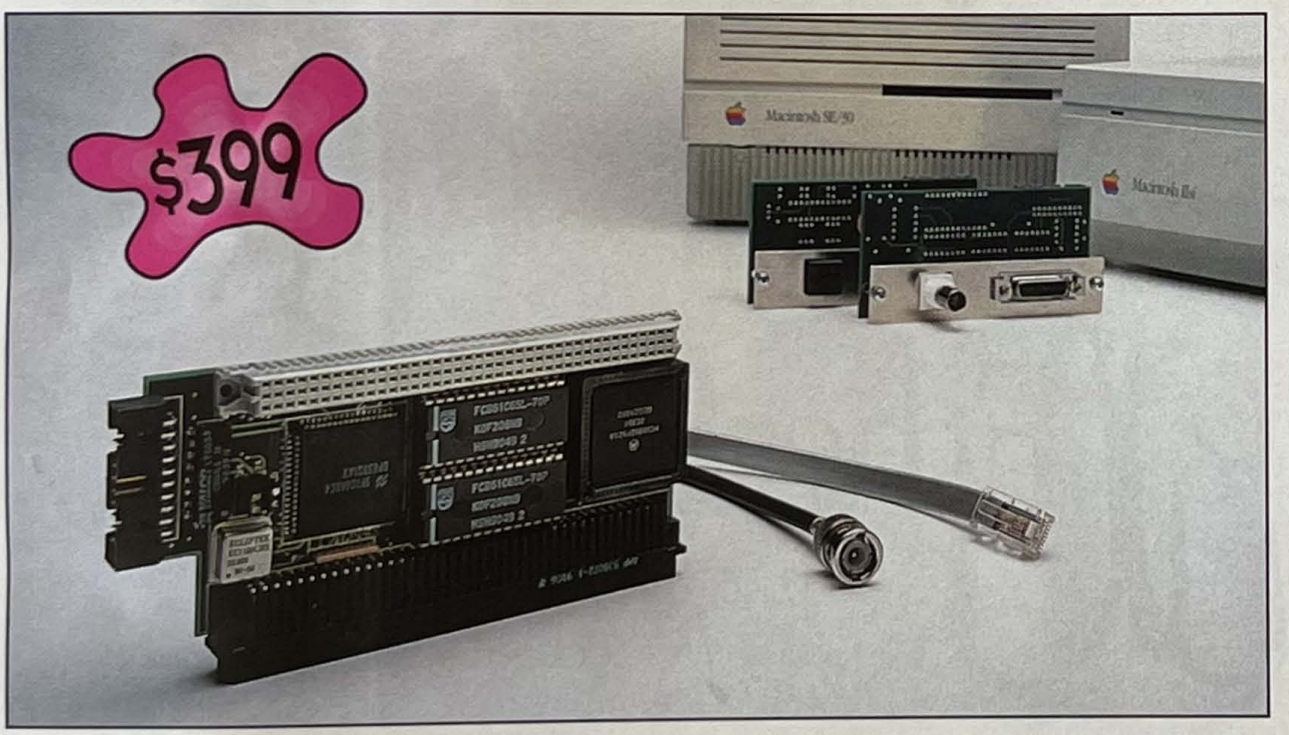
- X Window's Inter-Client Communications Protocol, enabling users of X Windows applications that can cut, copy and paste to use that method to transfer graphics and text to and from Macs.
- Creation of non-rectangular windows.
- Smoother, more-precise Bezier curves.
- A screen buffer to hold images.
- DEC-server security features.

Version 3.0 of eXodus, which is compatible with both A/UX 2.0 and System 7.0, supports DECnet and TCP/IP networking protocols. A separate Communications Solutions disk included with the program provides support for MacTCP, Macintosh Communications Toolbox and Thursby Software Systems Inc.'s TSFnet.

Upgrades are $50.

White Pine Software Inc. is at 40 Simon St., Nashua, N.H. 03060. Phone (603) 886-9050; fax (603) 886-9051. □

MagicBUS
Ethernet +1 for the Mac IIsi & SE/30



Flexibility
Only MagicBUS gives you Ethernet, PLUS the pass through capabilities for a second board. Now you can transform your Mac IIsi or SE/30 into a powerful workstation by attaching to the MagicBUS: monochrome or color video boards, accelerator boards, fax/modem boards, or cache cards *and also* get the speed and connectivity of 32 bit Ethernet. The MagicBUS IIsi even has an FPU socket built onto the board for added performance.

Features
The MagicBUS boards are the size of the Apple Mac IIsi PDS slot adapter and are System 7.0 compatible. MagicBUS has an upgradeable Static RAM buffer for greater data throughput and is available in Thin Coax or Twisted Pair versions.

Features	Sonic MagicBUS	Asante MacCon 30IE
Connect any Video Boards	✓	
Connect Accelerator Boards	✓	
Connect Fax/Modem Boards	✓	
Connect Cache Cards	✓	
Propietary Diagnostic Software	✓	
On-Board FPU for IIsi	✓	✓
Warranty	5 years	5 years
Price	$399	$379
Conclusion	Physically Fit	Physically Unfit

Don't limit the potential of your computer with any ordinary Ethernet Board. Even if you're not ready now, MagicBUS's features will support your upgrade needs for years to come.

Ethernet for other Macs
Sonic Systems also makes Ethernet Boards for the Mac SE, SE/30, II family, LC and IIsi. All boards are available with Thin Coax or Twisted Pair. In addition, cabling and connectors are now available from Sonic Systems. Call for pricing.

Support
All Sonic Ethernet Boards come with a 5 year warranty, free network diagnostic software and unlimited technical support.

Call Today to order or for more info.
1-800-535-0725
Sonic Systems Inc.

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Apple MacX update scheduled for August

By Mitch Ratcliffe

Cupertino, Calif. — Apple will ship a System 7.0 update for its MacX X Window display server in August.

MacX software lets Macs networked to a Unix server run applications created for X Window, a popular standard for networked Unix applications.

MacX 1.1.7, which is $295 per copy, adds System 7.0 compatibility and support for TrueType. Because it is an A/UX application as well, it is already 32-bit clean. According to Apple, there are no plans to add publish and subscribe or Apple events to the MacX software in the future. Older versions of MacX will not run under System 7.0.

MacX 1.1.7 ships with MacTCP, Apple's TCP/IP communications stack that uses Ethernet to make a connection to the Unix-based X server. It also runs on a Mac connected by Digital Equipment Corp.'s Pathworks to a DECnet network.

The new version will include 30 days of free Technical Answerline support.

Upgrades will sell for $95, but don't include Technical Answerline service. A/UX users do not need to upgrade to MacX 1.1.7 because they will receive it free with the System 7.0-compatible A/UX 2.0.2 due this fall. □

Mosaic lets NetWare Macs print to HP LaserJets

By Mitch Ratcliffe

Emeryville, Calif. — Mac users on NetWare networks can print to Hewlett-Packard Co.'s LaserJet and compatible printers with Mosaic for Macintosh, a new software package from Insight Development Corp.

Mosaic, which began shipping in April, made its appearance in a different form than was announced in January. No longer requiring a custom extension, Mosaic will work with the standard NetWare Desk Accessory to check or change the status of print jobs sent to an HP LaserJet.

When users select a LaserJet in the Chooser, Mosaic opens a NetWare queue window where HP printer options are available. Once a job is sent to the print server, users can hold or delete them via the NetWare DA.

Mosaic, which supports TrueType, requires that the Macintosh value-added process (VAP) for NetWare v2.2 or NetWare loadable module (NLM) for NetWare v3.11 be loaded on the server.

A three-user package that adds LaserJet printing capabilities for the Mac to the NetWare DA sells for $395; a 10-user package is $595.

Insight Development Corp. is at 2200 Powell St., Suite 500, Emeryville, Calif. 94608. Phone (415) 652-4115; fax (415) 652-9857. □

SDN offers clean, well-lighted place for data storage

By Mitch Ratcliffe

Los Angeles — Mac managers looking for a secure place to squirrel away important data might find that a new Mac interface to an off-site backup service from Secure Data Network Inc. offers the peace of mind they crave.

Due the third quarter of this year, the Mac interface to SDN will allow users to upload their crucial data to a local substation; to SDN's central office; or, to withstand a nuclear holocaust, to a computer housed in a retired Nike missile silo.

The pricing structure for the Mac electronic vaulting service is expected to be similar to that of the IBM PC and compatible service, which has been available for three years, the company said. PC users pay $45 a month for software; a 2,400-bps, 9,600-bps or 19.2-Kbps V.23bis modem; and one hour of connect time. Additional connect time is 20 cents a minute. For users supplying their own modems, the service begins at $29.

The fastest transmission speed available to most users is typically 12 Mbytes to 13 Mbytes an hour, even with an average compression ratio of 3-to-1, according to Frank Reed, SDN executive vice president. ISDN (Integrated Services Digital Network) connections would allow users to transmit data as fast as 500 Kbps, making SDN suitable for larger-network, minicomputer and mainframe users in the future, he said.

A recent announcement said that SDN and PacTel Meridian Systems Inc. agreed to begin to port SDN backup service to ISDN.

Secure Data Network Inc. is at 5777 W. Century Blvd., Suite 1600, Los Angeles, Calif. Phone (213) 641-1300; fax (213) 641-1033. □

Fax on Demand lets callers select documents

By Mitch Ratcliffe

Chatsworth, Calif. — For users tired of responding to a flurry of faxes requesting routine information, Magnum Software Corp. last month introduced an application that automates routine return faxing.

Available now for $80, Magnum's Fax on Demand (FOD) application works with the company's TFLX voice-mail system to let callers request fax documents from a Mac's hard disk responding to a series of voice-mail messages through the telephone key pad. Return faxes can be sent in the same phone call or in a call-back session.

FOD works on any TFLX, including the company's $495 entry-level model that handles only incoming voice-mail messages (see MacWEEK, Aug. 14, 1990). TFLX is a hardware and software system that uses a graphical programming language for creating a variety of phone-related applications, such as voice mail, order entry and technical support.

FOD requires a fax modem using Solutions Inc.'s BackFax software. TFLX works with any 1-Mbyte Mac equipped with a hard disk (2.5 Mbytes of memory is recommended) and a touch-tone phone. For performance reasons, Magnum recommends using the Mac as a dedicated machine.

Magnum officials promise an upgrade later this month that will make FOD and TFLX compatible with System 7.0.

Magnum Software Corp. is at 21115 Devonshire St., Suite 337, Chatsworth, Calif. 91311. Phone (818) 700-0510; fax (818) 700-8225. □

Dayna

From Page 24

The idea of an external Ethernet adapter is not new, but the DaynaPORT E/Z is the first to work with the Mac's printer port. Previously, users whose Macs had no slots available had only one choice. They had to connect through the sometimes-overburdened SCSI port.

The adapter is available in two models. DaynaPORT E/Z offers thin and thick Ethernet ports, while users who want 10BASE T Ethernet over unshielded twisted-pair phone wire must choose the DaynaPORT E/Z-T.

The DaynaPORT E/Z ships with a System 7.0 Ethernet driver; Apple's IIfx Serial Switch, a control panel that lets it work with the IIfx's printer port; and a power adapter.

Dayna Communications Inc. is at 50 S. Main St., Fifth Floor, Salt Lake City, Utah 84144. Phone (801) 531-0203; fax (801) 359-9135. □

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Smartmodem 1200B			$100	$
Smartmodem 2400			$100	$
Smartmodem 2400P			$100	$
V-series® Smartmodem 9600			$150	$
V-series ULTRA™ Smartmodem™ 9600			$150	$
Smartcom Exec™ PC software*			$ 35	$
Smartcom II® for the Macintosh®*			$ 35	$
*when purchased with one of the above modems		Grand Total of Rebates:		$

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APX promotes ISDN cooperation

By Mitch Ratcliffe

Santa Clara, Calif. — Apple Professional Exchange Inc. (APX) announced the formation of a consortium for high-speed communications at its May meeting that it hopes will accelerate the acceptance and standardization of ISDN (Integrated Services Digital Network) hardware and applications.

The first goal set by the consortium is to raise $250,000 to establish a new location for its ISDN laboratory. APX built an ISDN testing facility — which was demonstrated during the TEXPO '91 conference in San Francisco in May — at the Macamerica division of Merisel, based here. Apple, AT&T Co., Farallon Computing Inc., Novell Inc. and various telephone switch makers have donated equipment for use in the lab.

Vendors will be able to test their products for interoperability with other equipment, and corporate users will have the opportunity to test ISDN implementation plans before buying.

APX will provide initial management for the organization, but APX President Mike Bailey said the consortium will become independent. Mike Osborne, national ISDN product manager for Motorola Inc., told the meeting that his company would hesitate to join an organization with close ties to a single computer maker, namely Apple.

The consortium will offer several different membership levels. For a $6,000 contribution, for example, companies can get access to the lab for 50 employees. Individuals can join APX for $100 and have news-group access via electronic mail.

According to a recent survey of telecommunications managers by Datapro Information Services Group, 24 percent of the nation's companies are planning to add ISDN lines in the next year.

ISDN will allow twisted-pair phone cabling to carry as much as 128 Kbps worth of data over two channels, but how that capability can be put to use is the subject of much debate. Technical questions were the order of the day at the meeting, attended by technical staffs from a dozen companies that are developing ISDN products.

Apple Professional Exchange Inc. is at 415 N. Mary Ave., Suite 175, Sunnyvale, Calif. 94086. Phone (408) 980-1957; fax (408) 980-1884. □

ComTalk 2.3 filtering keeps intruders at bay

By Henry Norr

Ijamsville, Md. — New software from APT Communications Inc. lets administrators limit which parts of their corporate networks are accessible to remote users logging on through APT's ComTalk remote synchronous routers.

Called Network Filtering, the new security feature is incorporated into Release 2.3 of the ComTalk software, which is now available free to owners of any model in the company's router line. With the new version, administrators can create a list of authorized networks for each wide-area network port on the router; only the designated networks are made available to a remote site connected via that port.

On a LAN, the filtering feature can be used to shield designated workgroup networks from external groups on the same backbone, according to the company.

APT remote routers, connected to EtherTalk or LocalTalk networks, support synchronous connections ranging in speed from 56 Kbps to 1.544 Mbps. The company also makes multiport local routers and units that combine local and remote routing (see MacWEEK, Oct. 2, 1990 and Jan. 15).

APT Communications Inc. is at 9607 Dr. Perry Road, Ijamsville, Md. 21754. Phone (301) 831-1182; fax (301) 874-5255. □

CNet cards join Mac market

San Jose, Calif. — CNet Technology Inc. entered the Mac networking market last month with the shipment of two versions of a System 7.0-compatible Ethernet card for the Mac's NuBus slot.

The new CN420MACII/E card supports thick or thin Ethernet. The CN450MACII/ET supports thick coaxial and unshielded twisted-pair 10BASE T Ethernet. Both cost $399 and carry a five-year warranty. A proprietary AppleTalk Phase 2 driver provides full System 7.0 compatibility. The cards ship with a 16-Kbyte RAM buffer, which can be upgraded to 64 Kbytes with third-party RAM.

CNet Technology Inc. is at 2199 Zanker Road, San Jose, Calif. 95131. Phone (408) 954-8000; fax (408) 954-8866. □

This is your hard disk severely fragmented

This is how a typical fragmented hard disk looks. The abuse fragmentation can deal is a crime, and it's causing a national epidemic in offices everywhere. But the more you use your computer, the more your files are spread all over your hard disk. As a result, your disk has to work a whole lot harder than it has to. And increased head movement not only slows down your file access times, it will slow you down, too.

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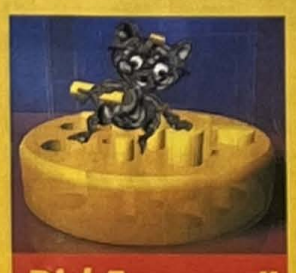

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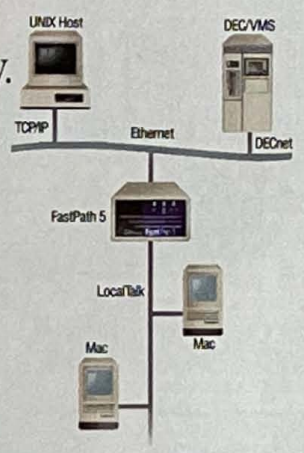
Fast Path. Faster Path.

This is about something no new product announcement should be without. Words that end in e-r: like newer, better and faster. Words that best describe FastPath® 5, Shiva's new generation of the leading, most reliable LocalTalk-to-Ethernet gateway.



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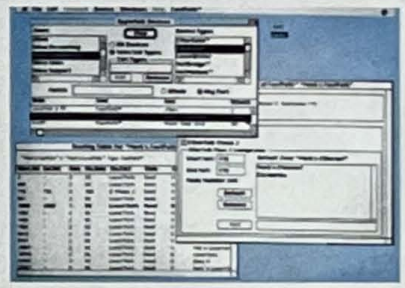
FastPath 5 is better. It has a LocalTalk I/O processor that can handle all the traffic a LocalTalk network can support and more. It has a larger memory, too; 512K to store and route more information than the most complicated networks can handle. Shiva has given FastPath 5 support for the most types of Ethernet connections—Ethernet thick, thin, 10BaseT and the Apple Ethernet Cable System.

And for a limited time, Shiva is giving away a free copy of NFS/Share software with each new FastPath. NFS/Share lets Macintosh users take full advantage of NFS servers on their Ethernet network.



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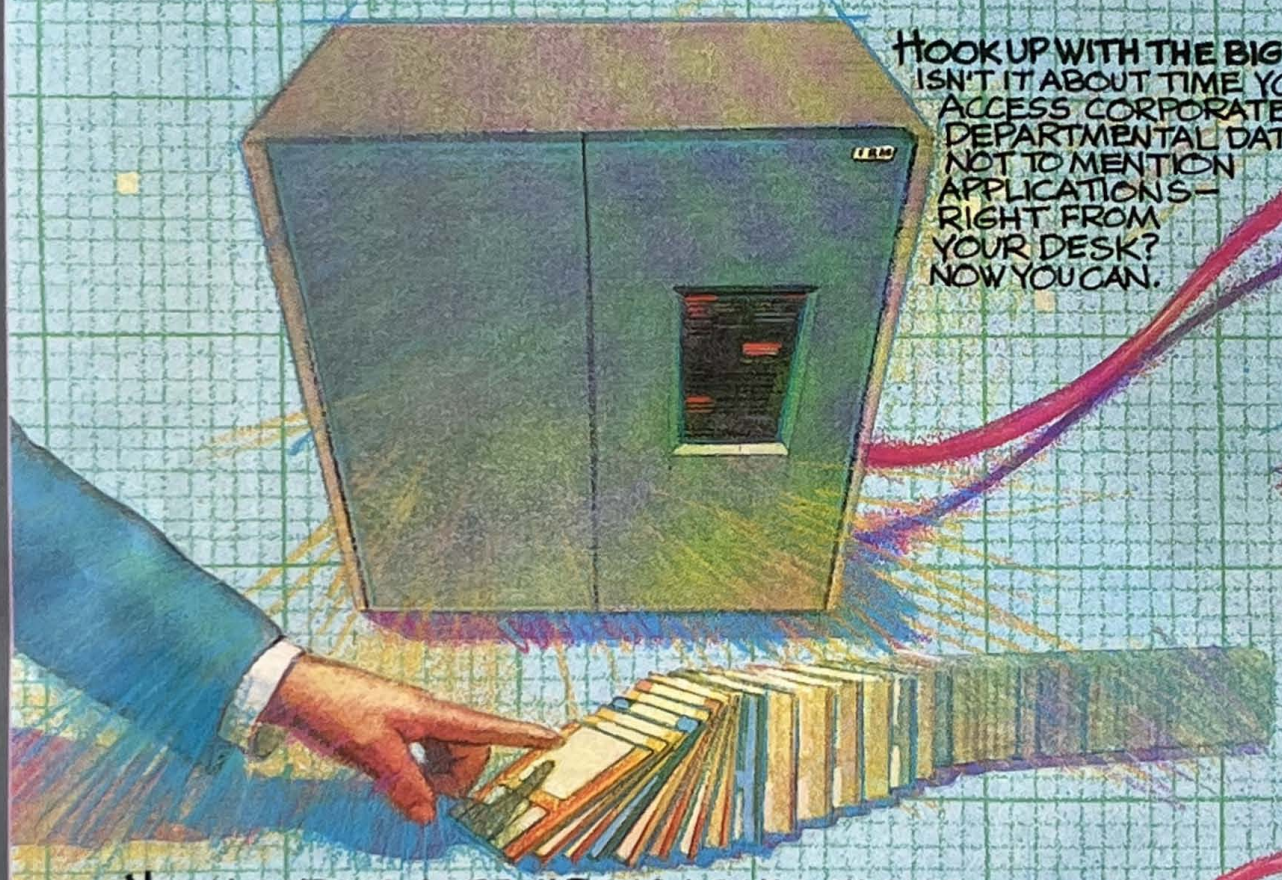

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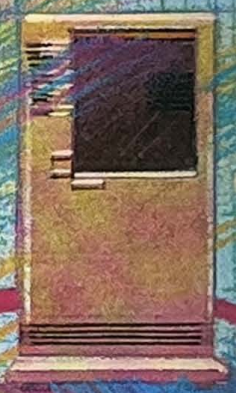

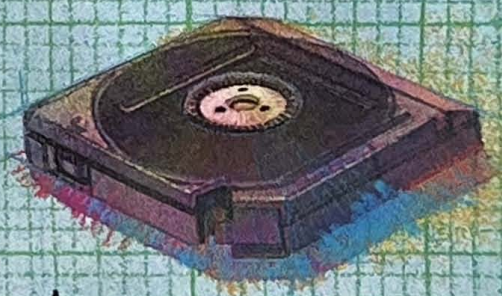

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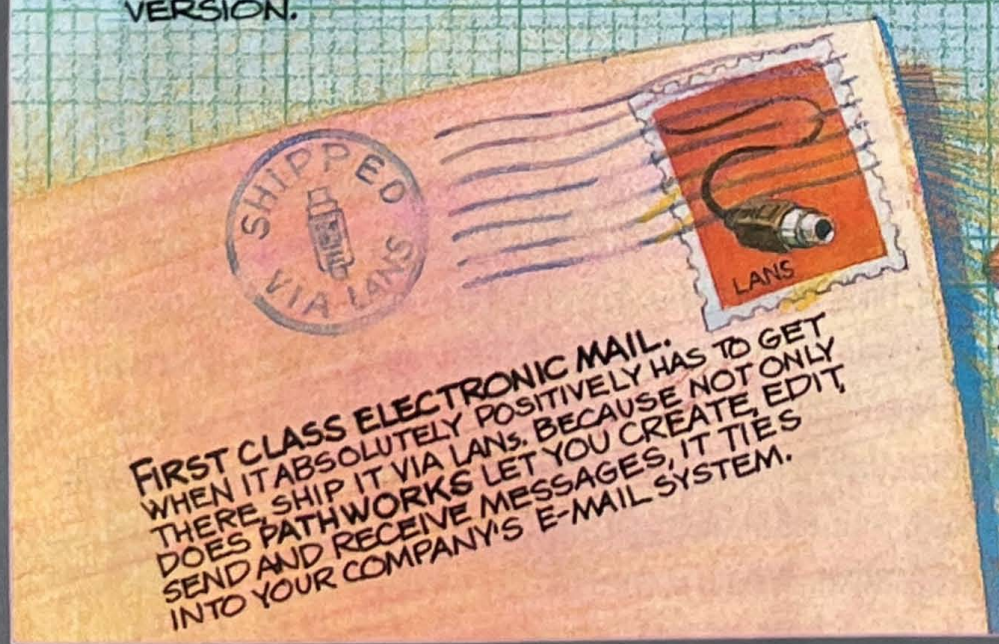

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COMPUTING FROM DIGITAL.

PIL interchange technology debuts

XTension to let Quark swap files

By Neil McManus

Las Vegas — An unlikely alliance of competing vendors last week released the Publishing Interchange Language technology that lets users swap editable documents between desktop programs such as QuarkXPress and traditional publishing systems such as Atex (see MacWEEK, Sept. 25 and Oct. 30, 1990).

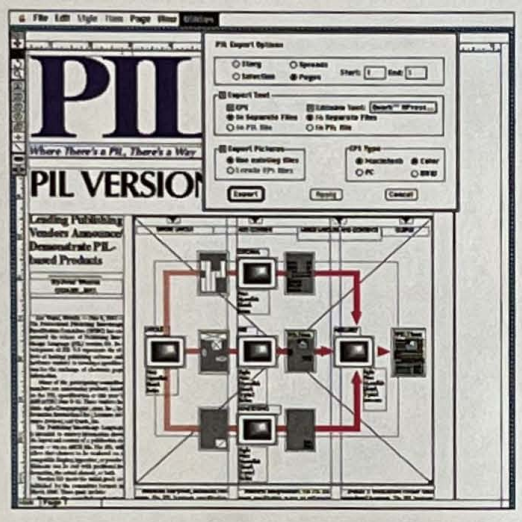
The PIL specifications were released at the American Newspaper Publishers Association/TEC '91 trade show here last week, but the payoff for Mac users won't come until this fall when Denver-based Quark Inc. ships its PIL XTension for QuarkXPress 3.1.

Quark's XTension will give XPress the capability to import and export PIL-compatible documents, retaining page geometry and elements or links to elements such as text and graphics. The price has not been set.

"The best thing about PIL is that your document can be completely revised once it's imported into another program," said Tim Gill, Quark's senior vice president of research and development. "People can switch to another program at any point in the production process."

Although the technology is aimed at newspaper and magazine professionals, even Mac-only desktop publishers will benefit if more Mac programs adopt the interchange language.

"Right now you can't pass documents between PageMaker and QuarkXPress, but PIL could make that happen," said Gill. "An artist could design a page in PageMaker and give the file to an editor who can work on it in QuarkXPress."



This preliminary version of Quark's PIL XTension lets QuarkXPress 3.1. export pages to traditional publishing systems, such as Atex.

Seattle-based Aldus Corp. is considering adding PIL support to PageMaker, an Aldus spokeswoman said.

By late 1992, Adobe Systems Inc. of Mountain View, Calif., is expected to release Interchange PostScript, a standard that will give users the ability to exchange self-contained editable PostScript files across programs and platforms.

PIL was designed by The Professional Publishers Interchange Specifications Committee, which included representatives from Atex Inc., Agfa Corp., Autologic Inc., Archetype Inc., Du Pont Camex, Crosfield Lightspeed, Informational International Inc., Lennane Advanced Devices, Mycro-Tek Inc., Quark, Scitex America Corp. and Sun Microsystems Inc.

For information on PIL, write to: Administrative assistant to the PPISC, c/o Quark Inc., 300 S. Jackson, Denver, Colo. 80209. □

Kodak's DCS lets photographers go digital using familiar equipment

By Carolyn Said

Las Vegas — With the Professional Digital Camera System from Eastman Kodak Co., photojournalists can switch from film-based to digital imaging without giving up familiar tools, the company said.

DCS is based on a Nikon F3 camera body and lenses with a Kodak digital camera back that contains a 1,280-by-1,024-pixel imager. To ship in August for about $20,000, the system will be available in color and black-and-white versions.

Kodak, which unveiled DCS at the American Newspaper Publishers Association/TEC '91 trade show here last week, said it expects the digital camera to "signal a major advance in the way photojournalists gather images." But while DCS eliminates processing time and produces images superior to those captured with analog still-video, it isn't a substitute for the image quality that silver-based technology delivers, Kodak said.

The camera has 8 Mbytes of RAM (capable of storing up to six images in a frame buffer) and connects via a cable to Kodak's Digital Storage Unit, a 10-pound, 200-Mbyte hard disk that can store up to 158 images. With an optional JPEG (Joint Photographic Experts Group)-compatiblecompression/decompression board, the DSU can store up to 600 compressed images. An optional 32-Mbyte frame buffer lets it store 24 images in RAM. The storage options will cost about $2,500 each.

The DSU has a 4-inch screen for image preview and selection. Images can be downloaded from the DSU directly to a Mac via a SCSI connection or transmitted via modem. A special driver allows direct uploading into Adobe Photoshop.

Eastman Kodak is at 343 State St., Rochester, N.Y. 14650-0519. Phone (716) 724-4000 or (800) 242-2424. □

Digital from start to finish, this image was captured with Kodak's new Professional DCS and downloaded to a Mac, where it was separated.

Mac-based lab stars at American Film Institute

By Connie Guglielmo

Hollywood — The Mac has been cast in a starring role at The American Film Institute, and its purpose is to help revolutionize the way film and television productions are put together.

With the help of a $1 million grant from Apple (see MacWEEK, June 12, 1990), the AFI, a national trust set up by the government to promote film and television as an art form, last month opened a new Mac-based lab here.

BOB RIHA

The American Film Institute in Hollywood recently launched a state-of-the-art computer lab.

The AFI-Apple Computer Center for Film and Video is equipped with 20 Macs, ranging from Classics to IIfx machines; large-screen monitors; laser printers; scanners; CD-ROM and videodisc players; and third-party software donated by 35 Mac developers.

The goal of the lab, according to director Nicky Martino, is to introduce AFI members to the latest in Mac technology, as well as to educate entertainment professionals about how that technology can be used to change — and improve — the way they work.

"Our goal is to create a state-of-the-art production, presentation and teaching environment for the Mac in the Hollywood community," Martino said. "We hope the lab will become a bridge between the technical world and the entertainment industry."

In addition, Martino said he sees Macs being used to develop new types of entertainment products, such as interactive presentations.

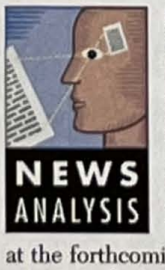
"The AFI has a tremendously rich backlog of material that could never be presented in a linear film fashion," Martino said. "For instance, AFI produced a feature-length documentary called 'Hollywood Mavericks' about directors such as Orson Wells, Martin Scorsese and David Lynch. We're working with The Voyager Co. to create an interactive videodisc that will explore the directors and their works."

The lab began offering classes in May, covering such topics as Mac fundamentals, scriptwriting on the Mac and the use of the Mac in a small production company.

"The AFI is a training ground for the directors and producers of the future," Martino said. "With the lab, we are interested in creating a new body of skilled individuals who will one day use the computer as part of their work."

The AFI-Apple Computer Center is at 2021 N. Western Ave., Los Angeles, Calif. 90027. Phone (213) 856-7664; fax (213) 467-4578. □

Graphics to evolve with 7.0



By Steve Rosenthal

Over the long run, System 7 undoubtedly will transform graphics applications on the Macintosh in several major ways. But looking ahead only at the forthcoming year, changes in most graphics software will be at best evolutionary.

System 7 will, however, bring quite noticeable differences in graphics performance, starting with better memory management and better file sharing.

Networking. Over the next few years, System 7 features such as Apple events and publish and subscribe will allow graphics software — and graphics software users — to work more closely together than had previously been possible.

Programs will be optimized to work in a more distributed environment. For example, Deneba Software's soon-to-be-shipped Canvas 3.0 can apply graphics transformation to "subscribed" text and images, and it can remember those changes and reapply them when the incoming data changes.

Some programs probably will include built-in code to request processing by other applications using Apple events. When Apple events-control programs — such as Frontier from Userland Corp. of Palo Alto, Calif. — are delivered later this year and next, users with an inclination for programming will be able to assemble automatic graphics routines of their own.

Better facilities for sharing data also should encourage more group projects and multiple document authorship. For example, in a

See System 7, Page 38

Introducing the first computer in history that's easier to use and more powerful than a Macintosh.

MacroMind serves up multimedia array

By Carolyn Said

San Francisco — Reflecting the multifaceted nature of multimedia, recent announcements from MacroMind Inc. span products and technologies.

▸ **MacroMind Three-D** will ship this month for $1,495. The 3-D animation, rendering and video-production tool is aimed at media professionals who want to create visual effects for videotape productions, presentations and visualizations, MacroMind said. Three-D consists of three modules that work together: 3DWorks for animation, RenderWorks for visualization and FireWorks for composition and output. MacroMind Accelerator, included with Three-D, can accelerate animations for real-time preview on screen. The program can import models in DXF (Drawing Interchange Format), IGES (Initial Graphic Exchange Specification), Swivel 3D, Sculpt 3D and Super 3D formats. It can output in PICT, PICS and RIB (RenderMan Interface Bytestream) formats.

MacroMind Three-D combines animation, rendering and video production tools. Users can create photo-realistic images, such as this.

▸ **The MacroMind Developers Conference** will be held here Nov. 11-13. Targeted at multimedia producers, the second annual conference costs $900 and includes sessions on QuickTime, multimedia content, MacroMind's products, and marketing and business issues, as well as a vendor trade show.

▸ **MacroMind Windows Player,** which lets users play Mac-created MacroMind Director presentations on an IBM PC running Microsoft Windows 3.0, will be available in a prerelease version this month for $995. Users who purchase the prerelease can upgrade for free to the final version, which will ship in the third quarter, also for $995.

▸ **Support for QuickTime,** Apple's system extensions for dynamic media, will be built into forthcoming MacroMind products.

MacroMind Inc. is at 410 Townsend St., Suite 408, San Francisco, Calif. 94107. Phone (415) 442-0200; fax (415) 442-0190. □

DTPublisher bimonthly series offers tutorials, templates and graphics

By Dartanyan Brown

Shreveport, La. — Desktop publishers seeking an inexpensive way to acquire more fonts, clip art, templates and utilities can look to DTPublisher, a bimonthly electronic publication from Softdisk Publishing Inc.

The series, which began appearing on a regular basis earlier this year, is available only by subscription; a six-month, three-issue subscription is priced at $39.95.

Each issue, shipped on an 800-Kbyte disk, emphasizes a particular type of publishing, such as newsletters, brochures or business forms. On-disk tutorials, templates for Aldus PageMaker and QuarkXPress, Encapsulated PostScript graphics and utilities for such tasks as font cataloging are included. In addition, issues normally include two Type 1 PostScript fonts, one a full family and the other a display face, plus hand-tuned bit-mapped versions, the company said.

With each disk, DTPublisher subscribers also receive DTPress, a hard-copy newsletter with software reviews, user tips and news about recent developments in the desktop publishing field.

Future issues, the company said, will include a utility for creating bit-mapped screen graphics from PostScript text files and a bare-bones layout application for users who currently have no way of combining text and EPS graphics.

Softdisk Publishing Inc. is at 606 Common St., Shreveport, La. 71101. Phone (318) 221-8718 or (800) 831-2694; fax (318) 221-8870. □

Canon, EFI sign cross-licensing pact

San Francisco — Canon Inc. and Electronics for Imaging Inc. this month announced a cross-licensing agreement. Canon will license to EFI patents governing EFI's Fiery ColorLaser controller for the Canon CLC-500 color laser copier, while EFI will license to Canon a patent on color technology.

Fiery, available this summer for $35,000, transforms the $49,000 Canon copier into a full-color PostScript laser printer-scanner that can be networked. Canon dealers now will sell and support Fiery. Canon also will continue to sell its $15,000 PS-IPU, which lets the CLC-500 function as a laser printer, but doesn't have continuous-tone color, network or scan capabilities.

EFI is at 950 Elm Ave., San Bruno, Calif. 94066. Phone (415) 742-3400; fax (415) 742-0251.

Canon is at 1 Canon Plaza, Lake Success, N.Y. 11042. Phone (516) 488-6700; fax (516) 354-8990. □

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VideoPaint 1.1 is System 7-savvy

By Neil McManus

South Miami, Fla. — Olduvai Corp. this month released VideoPaint 1.1, a System 7 update to the color paint program, which is now bundled with a collection of clip-art images.

Olduvai Corp.'s feature-laden VideoPaint 1.1 supports System 7.0 features such as publish and subscribe.

The $495 program contains such high-end features as 3-D wireframe creation and rendering with light-source controls; Bezier curves; an anti-aliasing brush; water-drop tools; color-separation capabilities; stencil and mask tools; and special effects such as spherization and blur.

VideoPaint's newly added System 7-savvy capabilities include support for virtual memory, TrueType, publish and subscribe, and balloon help.

Olduvai's program now can adapt to Apple's 12-inch RGB Display monitor with an optional tool palette. The program now can be used with the Mac LC and Mac IIsi because it no longer requires a Motorola 68882 floating-point coprocessor.

The new version of VideoPaint comes bundled with a free copy of VideoART, Olduvai's $99 collection of more than 200 color clip-art images in categories such as business art, maps and symbols.

Owners of previous versions of VideoPaint can upgrade for $29.

Olduvai Corp. is at 7520 Red Road, Suite A, South Miami, Fla. 33143. Phone (305) 665-4665; fax (305) 665-0671. □

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MediaText gives students the power of multimedia

By Carolyn Said

Phoenix — A "Brownie Instamatic of multimedia" being created at the University of Michigan could make students across the country instant multimedia producers, according to its developers.

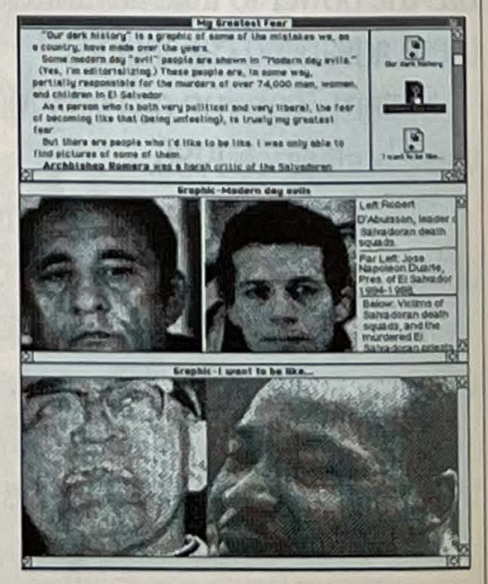
MediaText, an authoring system to be distributed free to more than 2,000 educators at the National Educational Computing Conference here this week, provides a simple way to annotate text with graphics, sound, animation and video clips. A commercial version is also in the works.

The program essentially looks like a familiar word processor with a column at the right containing "margin notes," icons that link to other media. Clicking on an icon activates the associated clips.

MediaText "supports a new type of learning environment, based on the notion of the classroom as a design studio," said Elliot Soloway, a professor at the University of Michigan and director of the group developing MediaText.

Students at the Community High School in Ann Arbor, Mich., have been using MediaText to create multimedia compositions rather than ordinary term papers, Soloway said.

MediaText's developers can be contacted at the Artificial Intelligence Lab, College of Engineering, University of Michigan, 1101 Beal Ave., Ann Arbor, Mich. 48109-2110. Phone (313) 936-1532; fax (313) 763-1260. □



MediaText, an authoring system aimed at students, uses icons (top right) to view linked documents (bottom).

LifeForms animates human figures

By Raines Cohen

Seattle — Creating human figures and showing them in a multitude of postures and motions can be a laborious process with traditional animation tools, which are designed to generate geometric shapes or canned images.

LifeForms, a human-figure animation application originally designed for choreography, will simplify the process, according to its developer, Kinetic Effects Inc.

LifeForms incorporates a working model of the human body and its joints, so it can create forms that bend and move realistically. Users manipulate an on-screen body representation into a desired position and location on a stage.

Users click and drag limbs and rotate joints to adjust the on-screen body, then "freeze" the image, recording key frames onto a time line.

The program then can create animations, interpolating to produce smooth motion with an outline or contour form.

Animations can be played on screen or exported as PICS files or command files that can be used by Swivel 3D, the rendering program from San Francisco-based Paracomp Inc. Swivel 3D can easily add surfaces to produce individualized animated characters.

"I want to use [LifeForms] in all sorts of multimedia productions, such as the educational CD-ROM I'm producing on the greenhouse effect," said Peter Mitchell, owner of Big Animated Digital Productions of Victoria, Australia. "I might have a teacher walk around and point at things. It gives me a very memory-efficient character, in comparison to a PICS animation or a series of bit maps."

Several posture libraries, known as palettes, are included with LifeForms; others sold separately include dance, gymnastics, ice skating, basketball, football and pedestrian motions. Users also can create their own palettes with a built-in editor.

Kinetic Effects will sell animation libraries containing motion sequences for sitting, leaning against walls, crossing legs and the like. A licensable HyperCard external, included with the package, will allow selective playback of LifeForms animations, with direct random access to any frame.

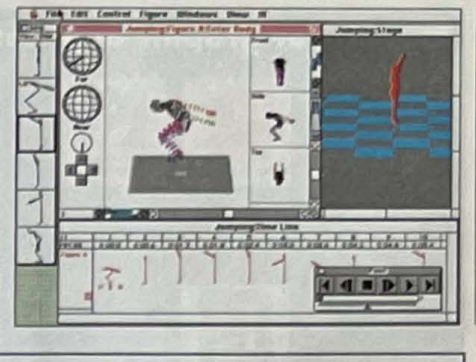
The company said LifeForms can play animations at up to 60 frames per second. Realistic body motion can be achieved with as little as 2 fps.

A beta version of the program is being released to animation developers this month for $1,200. A license to use the generic bodies supplied with the program in animations is included, but the stack player will be licensed.

An end-user version, targeted at professional animators, is due by the end of the summer. Pricing has not been set.

Subsequent releases will add a scripting language, on-stage video and support for Apple's QuickTime system extension. A Silicon Graphics version of the program is due this summer.

Kinetic Effects Inc. is at 1319 Dexter Ave. N., Suite 310, Seattle, Wash. 98109. Phone (206) 283-6961; fax (206) 283-1131. □



LifeForms, now from Kinetic Effects, helps users bring human figures to life. It uses a time line and a series of views, shown here, to let animators specify movements and positions over time, and it fills in the frames in between.

Postcraft adds new templates

Valencia, Calif. — Postcraft International Inc. has added two new template packages to its line of layouts for desktop publishing software.

The two packages, Printer's Apprentice Layouts Flyer Pack Combo and Printer's Apprentice Layouts Stationery Pack Combo, offer 40 layouts for use with Aldus PageMaker, QuarkXPress and Letraset's DesignStudio.

All the templates can be used as is or altered to change fonts, text layout, graphics, backgrounds and headlines. The templates contain PostScript graphics and use Pantone colors. Each package is $89.95.

Postcraft International Inc. is at 27811 Avenue Hopkins, Suite 6, Valencia, Calif. Phone (805) 257-1797; fax (805) 257-1759.□

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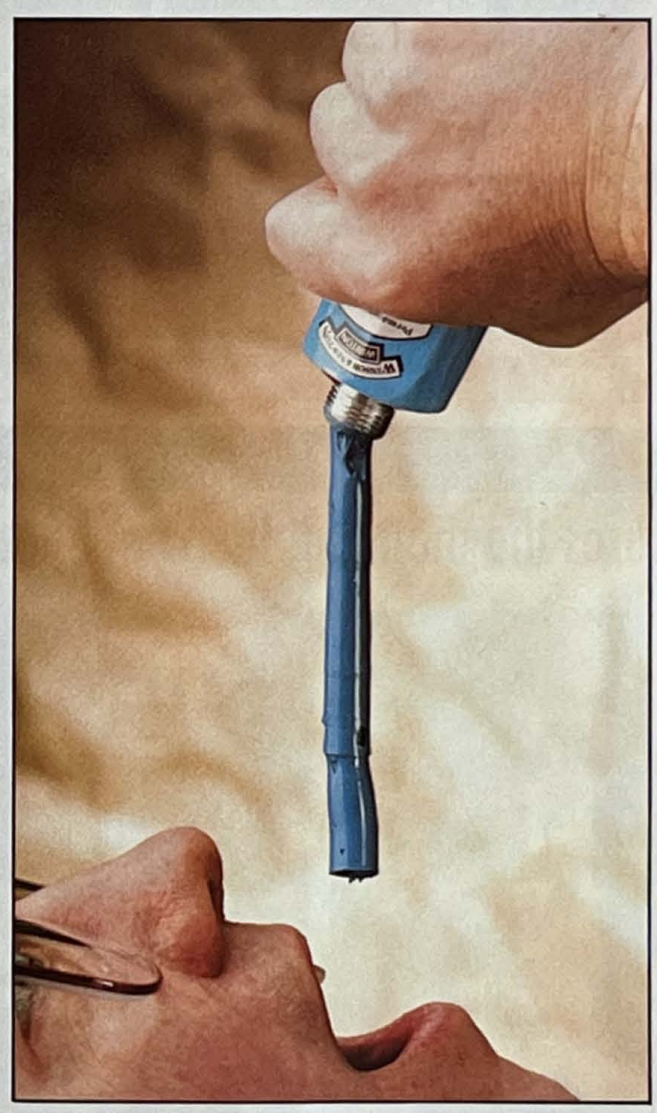

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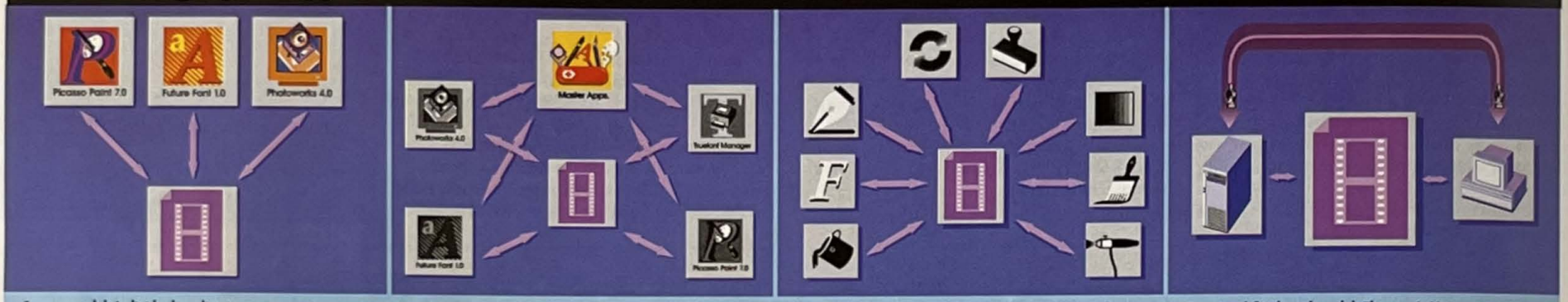
Models for graphic applications



Current model: Individual applications are used in succession to edit an image.

Hub program model: A hub application serves as the control point and integrates the results of supporting graphic applications or utilities.

Toolbox model: Large applications are replaced with mix-and-match sets of small, specialized applications.

Front-end/back-end model: The user's Mac calls on network resources or a special back-end rendering Mac for complex processing.

Choosing an architecture for new programs under 7

Despite System 7's long gestation period, many developers haven't yet settled on an architecture for their new programs or major updates. There are several possible models for these new, more cooperative graphics applications.

▸ In a "hub program" approach, a few applications would become centers of their own constellations of utility programs. Using Apple events to pass commands and status information, plus publish and subscribe to exchange image contents, a hub program would take the central position while relegating other programs to supporting and utility roles, said Steve Pollock, Claris Corp.'s senior product manager.

▸ In the "virtual toolbox" approach, major applications would be replaced by many small, single-function applications, all of which would communicate using Apple events and publish and subscribe. However, developers say, there are major questions about whether such an approach would be economically viable.

▸ A "front-end/back-end" approach would put the interface portion of a graphics program on each user's desktop but would distribute lengthy processing steps over the LAN to high-powered machines or any Mac with idle processing time.

Such an approach makes sense because on a typical network many machines spend most of their time merely waiting for instructions from the user, said Eric Hautemont, president of Ray Dream Inc. of Mountain View, Calif. Recently the company has been demonstrating the use of a remote Mac IIfx to speed the rendering of an image designed on a slower Mac in its 3-D modeling program. — *By Steve Rosenthal*

SCREEN TEST

Photo teacher captures the moment, then enhances it

San Francisco — When a missile misfired at Vandenberg Air Force Base in California, leaving strange trails of smoke and gas near where Joel Slayton was teaching an outdoor photography class, Slayton quickly pulled out his video camera.

"If you're in an event that is newsworthy, you're not going to throw down your camera and run," Slayton said.

For the next 20 minutes, Slayton captured the reactions of his students on videotape. Later, using video frame-grabbing equipment, he isolated one image and manipulated it in Adobe Photoshop. Slayton, who designs theater sets with Macintoshes, often uses a frame grabber to "explore images from videotape."

To capture the image of the student shown here, Slayton used a Sony video playback deck and a 32-bit, 4-Mbyte NuVista+ card from Truevision Inc. (now part of RasterOps Corp.) with his Mac IIci and Sony Trinitron 15-inch monitor. To achieve the blurry effect, he grabbed the image as the tape was moving from one frame to the next. Importing the file into Photoshop, Slayton dropped out the background and adjusted the color values. He cut and pasted parts of the woman's head to show her "moving through space," then selected a section of her clothing and repeatedly cut and pasted it to form the yellow areas of the background.

"I use the cut and paste tools extensively," Slayton said. "Sometimes I grab two pixels and cut and paste for two to three hours until I get the right texture."

A cibachrome print made from a slide of Slayton's piece is now on display as part of an exhibit of computer-enhanced photography at the Ansel Adams Center here. — By Allison de Laveaga

System 7

From Page 32

group producing a new annual report, one contributor could publish the figures, another the graphics, another the text of the president's message and another the photos. Meanwhile, an editor with an integration application — such as a future update of Aldus PageMaker, QuarkXPress or Ventura Publisher — could assemble the result.

In larger organizations, the publish and subscribe functions also should facilitate certain types of data standardization, said Rob Auster, an analyst for BIS Strategic Decisions of Norwell, Mass.

Workgroups within companies will assume responsibility for selected images and publish them on the LAN for widespread use. When updates are made, they'll automatically propagate through any new subscribing documents. For many companies, Auster said, the reduction in duplicated efforts will be significant.

Those same economies of scale also will encourage greater use of central image servers on large hard disks or CD-ROMs. Without consuming their own hard disk space, individual users will have transparent access to hundreds of megabytes of images on a server via either a library application that publishes the images or aliases that make the disk directories available on remote desktops.

However, it may take some time before developers coordinate their new publish and subscribe features. Right now, "everybody wants to be a publisher — the problem is finding subscribers," said Larry Miller, vice president of marketing at Caere Corp. of Mountain View, Calif. Widespread use of publish and subscribe, he pointed out, depends on general agreement on object formats, a set of meaningful Apple events for graphics and some conventions for interpreting transferred data.

QuickTime. Apple's QuickTime system-software extensions for handling time-based events also will boost graphics software. When QuickTime becomes available later this year, many existing applications that work with PICT-format images also will be able to use QuickTime's new Movie data types to show moving images. In effect, most static graphics applications will become instant "multimedia" applications.

Perhaps even more important for most graphics users, QuickTime includes built-in JPEG (Joint Photographic Experts Group) compression for still images and object-oriented graphics. With image compression a standard part of the system, users will be able to store more files and exchange files on the network more quickly.

Expanded memory. In the short term, System 7's expanded 32-bit addressing and the larger address space it permits will make the transition to the new system worthwhile for many graphics users. On a 32-bit-clean Mac, System 7 raises the maximum amount of supported RAM from about 8 Mbytes to more than 1 Gbyte. More memory makes it possible to work with larger images and greater color depths.

For users who can't justify the cost of added chip memory, System 7's virtual memory will add the same logical capability, using space on a hard disk to simulate chip memory. However, while virtual memory will make it feasible to open multiple documents and multiple applications, it may not be responsive enough for editing documents larger than available chip memory.

Interim releases. It will take most graphics developers at least several more months to properly implement new architectures, Apple events, and even publish and subscribe capabilities, but several companies say they will release interim updates that support System 7's TrueType font technology and balloon-help user information system.

TrueType's main immediate benefit to graphics users may be the competitive spur it has applied to Adobe Systems Inc. and its PostScript fonts. But eventually both font systems should be able to deliver similar capabilities.

Balloon help should be particularly useful as an on-screen guide to the the complex layered tool palettes used with many graphics applications. □

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New Media STEVE ROSENTHAL

Turning multimedia inside out

If a revolutionary product turns everything upside down, what would you call a development that turns everything inside out? That's just the term we need for what should happen to multimedia with the combination of System 7 and QuickTime.

Look at the way we do multimedia (or media integration, if you prefer) now. In the current paradigm, the operating system provides the common elements of the user interface, program launching and on-demand services. You develop images and sounds with a variety of vertical tools. And then you use a multimedia integration program to pull everything together.

Some programs export data for other programs. But programs aren't generally designed to accommodate incoming requests from the system. At any one time, one user program is in charge of pulling together all elements. And whatever programs you start with, you have to end up with files in a form that make sense to the program that does the final integration.

Now look at the resources multimedia users should be able to draw on once developers get a chance to deliver the promise of System 7 and QuickTime. With Apple events, the Edition Manager and QuickTime, programs will be able to exchange data more freely. They'll be able to accept as well as send requests. And several programs can run at once while the operating system does time synchronization.

Furthermore, because there will be a standard means of messaging, you should be able to divorce the front end seen by the user from the back end that manipulates the data and delivers the result. Just the way the arrival of networking and the adoption of SQL allowed databases to split into front-end programs with good user interfaces and back-end programs with high throughput, QuickTime and Apple events should allow multimedia to split into user-oriented front ends and production-oriented delivery programs.

QuickTime and Apple events should allow multimedia to split into user-oriented front ends and production-oriented delivery programs

With the divorce of the interface from the delivery vehicle, the user interface can be embedded as one more function in a mainstream program or vertical market package.

In the way most spreadsheets let you do static graphics today, the spreadsheets of tomorrow will let you include moving graphics and video — all without leaving the spreadsheet metaphor.

In fact, if multimedia follows the database example, more people may end up using spreadsheets as front ends than use dedicated media programs.

For users, it should mean that simpler multimedia features increasingly will seep into their everyday applications, the way more-sophisticated layout options have appeared in databases, spreadsheets and word processors. High-end multimedia will become a network resource on a multimedia server. But if done right, just as the way you don't need to know SQL to use a front-end system, users will be able to exploit richer media types without knowing drop-frame timecode from true color.

The effect on the companies that make multimedia tools could also be striking. If this model is right, in a few years multimedia on the Mac will be a very different business. Companies with experience in media products and with databases will make multimedia engines. The engines could run on Macs, but they also might run on specialized multimedia machines. Other companies will make or embed the front end into user products.

None of this happens overnight, of course. But it's clearly time to start thinking about it as we buy or develop software. After all, if this new paradigm does become prevalent, you certainly don't want to end up on the outs. □

Send tips and comments to Steve Rosenthal, c/o MacWEEK, 301 Howard St., 15th Floor, San Francisco, Calif. 94105; AppleLink: Steve.R; MCI: 114-8611.

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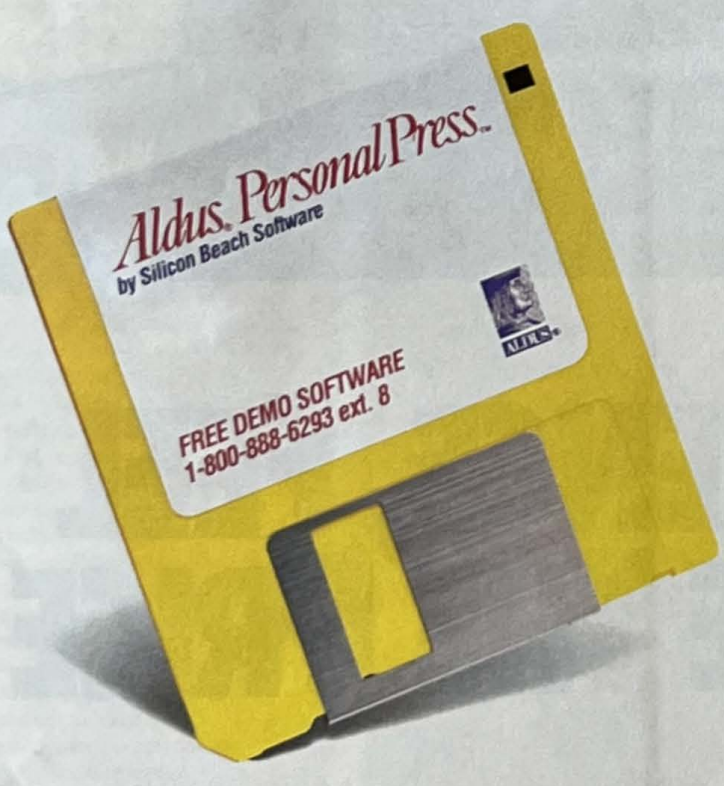

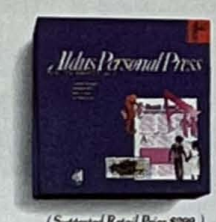

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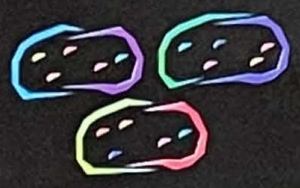
The MacWEEK Impact

MacWEEK volume buyers are no small potatoes  . Each MVB buys Macintosh products for an average of **74** Macs each.

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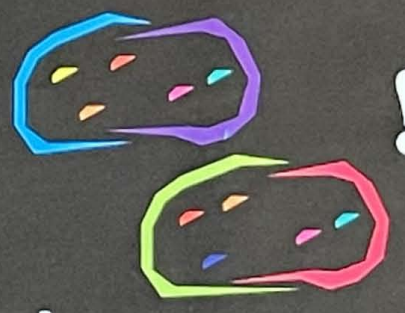
advertisements in the last twelve months. That's big potatoes  !

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9 out of 10 Mac spreadsheet users use Microsoft Excel. What are we doing wrong?

Tell us what's on your mind and it could end up on your screen.

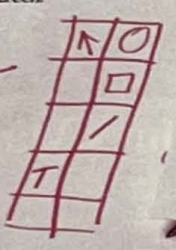
System 7.0 support

Sincerely, Ellen Rice

9 out of 10 Mac spreadsheet users use Microsoft Excel. What are we doing wrong?

Tell us what's on your mind and it could end up on your screen.

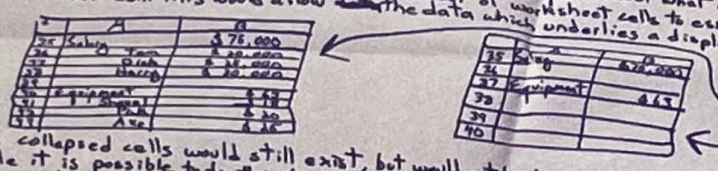
Drawing tools



9 out of 10 Mac spreadsheet users use Microsoft Excel. What are we doing wrong?

Tell us what's on your mind and it could end up on your screen.

"Collapsing Cells": Collapsing cells would be to a spreadsheet what outlining is to a word processor. A "collapse" command would allow a number of worksheet cells to essentially disappear and become part of a "header" cell. This would allow the data which underlies a displayed number to be kept with that number, but not (necessarily) shown.

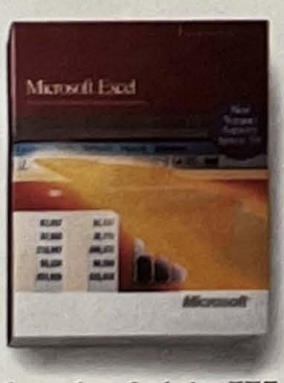


The collapsed cells would still exist, but would not be displayed or printed unless an "Expand" command were used. While it is possible to do this trick by setting row heights to zero, it would be slick to have this be an automatic feature.

Sincerely, John Broadbent, Golden Valley, Minn.

Microsoft Making it all make sense

New Microsoft Excel of an exhaustive cor



Betsy Mill put it all in perspective when she wrote to us, "I love [Microsoft] Excel as much as my microwave oven but no love is perfect."

Well, Betsy, get a load of this. We think new Microsoft® Excel version 3.0 is the closest thing to perfection ever seen in a spreadsheet for the Mac.® For one good reason.

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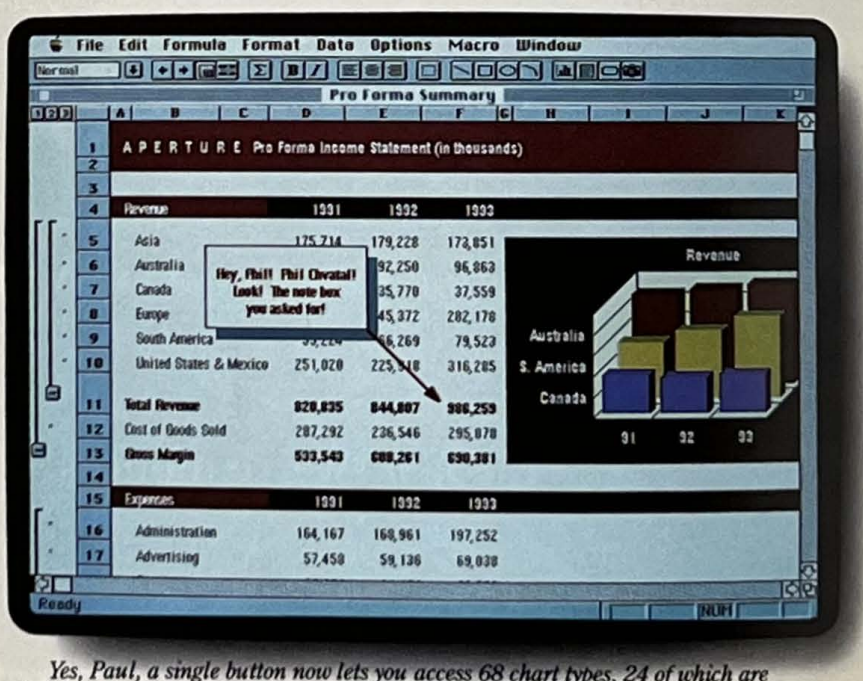
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Canada 35,770 37,559
Europe 45,372 282,178
South America 66,269 79,523
United States & Mexico 251,020 225,518 316,285
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Cost of Goods Sold 287,292 236,546 295,878
Gross Margin 533,543 608,261 690,381
Expenses 1991 1992 1993
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Yes, Paul, a single button now lets you access 68 chart types, 24 of which are 3-D. You can incorporate these right into your worksheet, along with text and data. And notice the outlining feature on the left? Go nuts.

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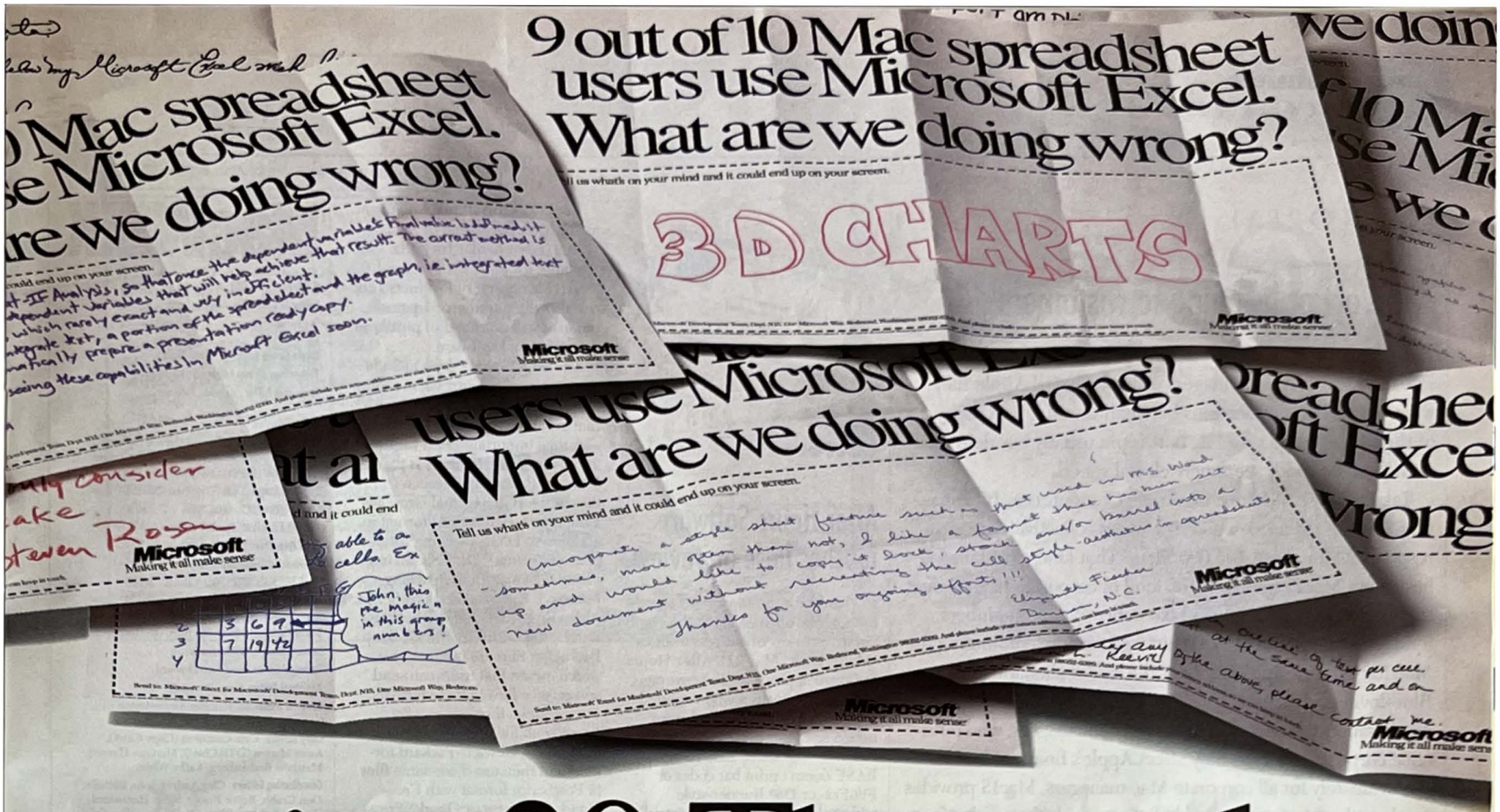
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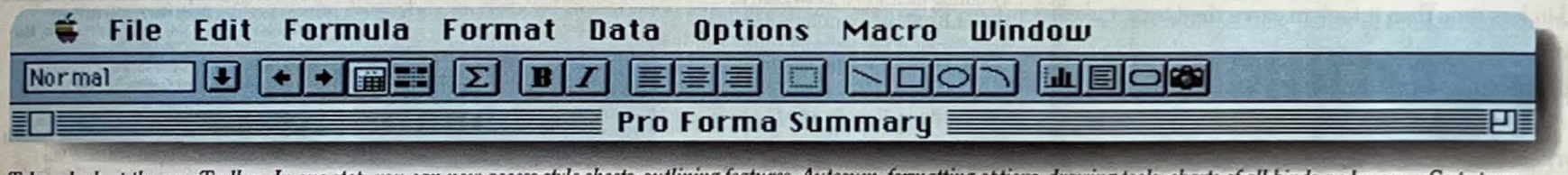

Take a look at the new Toolbar. In one step, you can now access style sheets, outlining features, Autosum, formatting options, drawing tools, charts of all kinds and macros. Go to town.

or expand worksheets without having to create multiple files.

As for charting, we took our cue from Paul Woods, who began his letter with the salutation, "Charts, charts, charts!" Hey, Paul – check out the picture and caption for the full scoop.

Did we mention that you can consolidate up to 255 worksheets at a time, regardless of format?

Or the Goal Seek feature, which lets you put in the total you want and works backwards from there to fill in the variable you need?

Or the fact that this is the first System 7.0 application available?

Plus, you can update to version 3.0 for $129. If you acquired your current version of Microsoft Excel on or after 12/7/90, the upgrade is only $50*. Call (800) 541-1261, Department Q84, to find out more.

By the way, Bryan Larson: we said hi to Bill for you. He sends his regards.

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EDITORIAL

The art of listening to customers

Apple long has had a credibility problem with its corporate customers. Mac managers continually tell Apple they want better communications between the Mac and the rest of their computing systems, but Apple usually has delivered such products with seemingly glacial speed.

Take the case of Managing Apple Computers in Information Systems (MacIS), whose members collectively are responsible for about 135,000 Macs. That kind of installed base gives MacIS members the kind of corporate buying clout that makes Apple executives take notice. MacIS members tend to be the mavericks in their organizations, promoting the Mac for strategic applications at the risk of alienating Big Blue-loving colleagues. That tension makes it essential that Apple satisfy the demands of corporate managers, who influence corporate users as they affect Apple's financial health.

Fortunately for all corporate Mac managers, MacIS provides Apple with an in-focus crystal ball that reveals the needs of customers with large installations. To its credit, Apple uses MacIS' feedback to fine-tune its products. That fine-tuning could proceed a lot faster, though, given that many of the same issues are raised among MacIS members from meeting to meeting.

What can we expect from Apple if it continues to respond to MacIS members' stated needs? Direct support, including continued and improved access to Apple field staff, long has been a major concern among large-business customers. MacIS has made this an issue in previous meetings. Apple must listen to its customers, making sure both sides speak the same language, and respond in less time than it took to carve the Great Lakes.

MacIS managers face other important issues related to the Mac's role in large, mixed environments. Apple has heard demands for improved system software and network security; more network management options; and a greater role for Data Access Language (DAL) in client/server computing, transaction processing and across a wider range of server platforms.

In short, large businesses are telling Apple they want the Mac to serve an integral role in strategic applications, and they want Apple to help them achieve that role. By listening and responding, Apple can ensure itself a valued place in corporate America. Only Apple's competition could object to that. □

3 years ago in MacWEEK

June 21, 1988: Lotus Development Corp. announces the stillbirth of the integrated program Modern Jazz. Future Mac development efforts will center on 1-2-3 for the Mac, announced a year earlier.

In retrospect: Four years later, we're still waiting.

Letters

After Hours Software touches base on review

Thanks for the favorable consideration of TouchBASE in the comparative review of address utilities (MacWEEK, May 21). After Hours Software appreciates the coverage, and overall, it was a well-rounded view of the products, but I must note a few inaccuracies.

The review stated that TouchBASE doesn't print bar codes or FiloFax- or Day Runner-style address books. TouchBASE actually performs all these tasks. TouchBASE gives the user the option of applying a postal bar code to an envelope through the envelope template editor. TouchBASE also provides users with an option that allows them to print to both Day Runner Running Mate and FiloFax personal organizers and to Day Runner Classic Edition address books.

The review also stated that with more than two concurrent users, TouchBASE can slow down significantly. This statement is somewhat misleading because the major contributing factor in a slowdown of TouchBASE when using a data file on a server is the network traffic itself, and TouchBASE contributes insignificantly to network traffic. For example, if you were to copy a large data file from the server to a local machine, anyone trying to access the server would be affected, including anyone accessing a TouchBASE data file in multi-user mode. The slowdown would be caused by a busy network, not the number of TouchBASE users.

Stan Shaul, product manager
After Hours Software
Van Nuys, Calif.

Reviewer Becky Waring replies: We're delighted to discover that TouchBASE includes both the ability to print bar codes and to print in these address-book formats. We will be doubly delighted when After Hours Software includes this information in the TouchBASE documentation.

The fine details of Desktop Packaging Plus

Thanks for your story about Desktop Packaging Plus (MacWEEK, June 4). A couple of points need clarification, however.

First, the $6,528 price does not include the packaging of Ashlar Vellum from Ashlar Inc.; that is available for $995 for Version 1.0. When Montgomery Products Ltd. releases the parametric upgrade, the user will not need to purchase the additional software.

The $6,528 price does include six months of support via modem, using the communications tools that are included in the software.

A final important point for those in the packaging industry is that Desktop Packaging Plus can receive files in the IGES (Initial Graphic Exchange Specification) format in addition to DXF (Drawing Interchange Format), DDES2 (an international format for the packing industry), Encapsulated PostScript, Aldus FreeHand and Adobe Illustrator. File transfers with Desktop Packaging Plus are bidirectional, which means that users can send and receive files in these formats. For example, they can receive a Lasercomb file, which imports as a DXF file (a Hewlett-Packard format) and then use those same files in PostScript format with FreeHand, Illustrator or QuarkXPress. They can then send those files back to the HP DXF environment.

Miriam M. Hughes, account manager, Montgomery Products Ltd., Phoenixville, Pa.

Independent Claris: Don't lump us with Apple

The editorial, "Claris Windows could aid Apple's vision," (MacWEEK, June 4) was misleading and inaccurate and cannot stand without rebuttal. I am an employee

GORDON STUDER

of Claris Corp. I do not find it at all appropriate for MacWEEK to combine our corporate name with Apple's. Claris is a wholly owned, *independently operated* subsidiary of Apple Computer Inc.

Apple manufactures hardware. Claris develops application software. Let's keep that distinct difference in mind.

Michael Whitney
Claris technical support
Claris Corp., Santa Clara, Calif.

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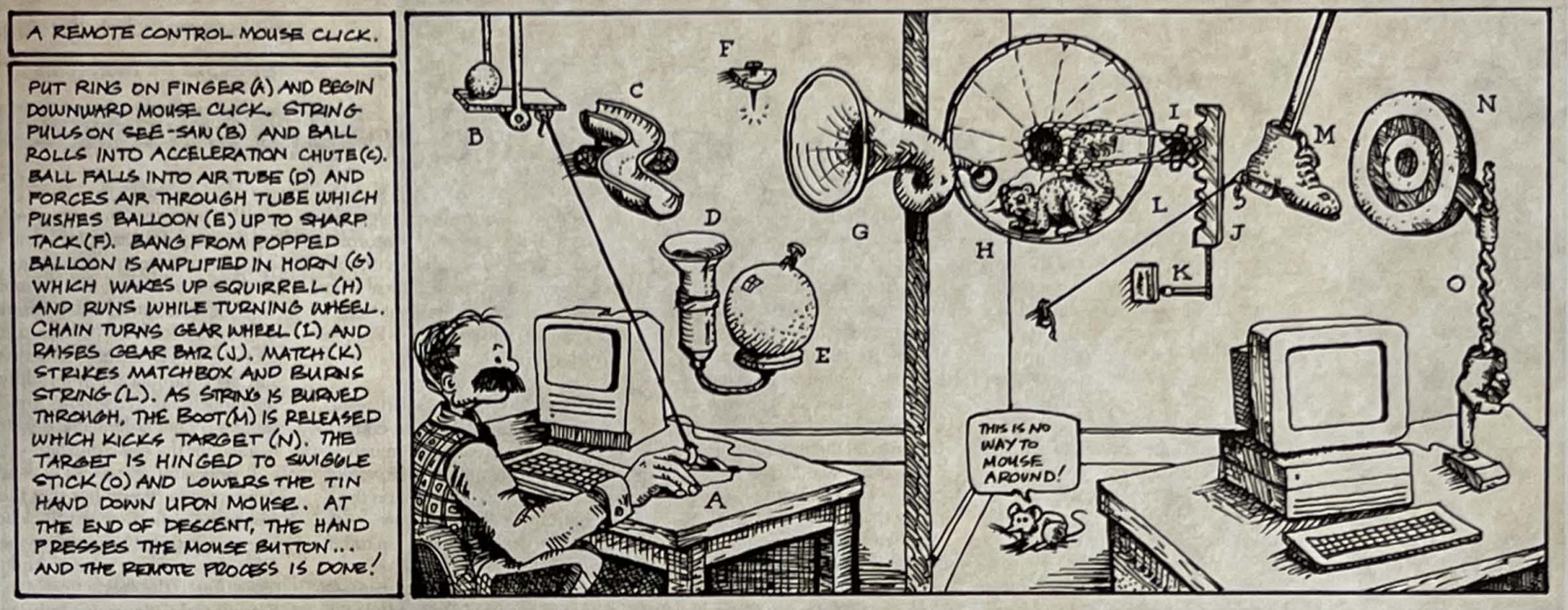
A REMOTE CONTROL MOUSE CLICK.
PUT RING ON FINGER (A) AND BEGIN DOWNWARD MOUSE CLICK. STRING PULLS ON SEE-SAW (B) AND BALL ROLLS INTO ACCELERATION CHUTE (C). BALL FALLS INTO AIR TUBE (D) AND FORCES AIR THROUGH TUBE WHICH PUSHES BALLOON (E) UP TO SHARP TACK (F). BANG FROM POPPED BALLOON IS AMPLIFIED IN HORN (G) WHICH WAKES UP SQUIRREL (H) AND RUNS WHILE TURNING WHEEL. CHAIN TURNS GEAR WHEEL (I) AND RAISES GEAR BAR (J). MATCH (K) STRIKES MATCHBOX AND BURNS STRING (L). AS STRING IS BURNED THROUGH, THE BOOT (M) IS RELEASED WHICH KICKS TARGET (N). THE TARGET IS HINGED TO SWIGGLE STICK (O) AND LOWERS THE TIN HAND DOWN UPON MOUSE. AT THE END OF DESCENT, THE HAND PRESSES THE MOUSE BUTTON... AND THE REMOTE PROCESS IS DONE!
A
B
C
D
E
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G
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N
O
THIS IS NO WAY TO MOUSE AROUND!

Now support network users in less time. Use Carbon Copy for the Mac.

Carbon Copy™ for the Mac 2.0 lets you access other Macs on your network from your own. Supporting users can be a burden. Most problems require immediate action. Now you can respond to problems quickly and with fewer interruptions.

Remote control lets you direct another Mac's screen, keyboard and mouse. And you can send and receive as many files as you wish at the same time. You can even send needed files while working on something else! By setting the level of access for your computer, you'll be protected against unwanted visitors too.

At $299 for *unlimited* users, Carbon Copy is absolutely the best value in remote control and file transfer. Carbon Copy's network-only version lets you use the program on all Macs in a single AppleTalk network zone for a single low price. To use Carbon Copy to access your office Mac remotely, ask for the Single User package which includes both network *and* remote access. Or ask for the MacModem, a 9600-baud V.32 modem, two copies of Carbon Copy and the MacModem wake-up cable that turns on your remote Macintosh. Plus, free support is provided to registered users, and you can contact us 24 hours a day via America Online.℠

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Carbon Copy works by connecting two or more Macintosh computers on any AppleTalk network. One copy of Carbon Copy is required on each computer. Remotely, Carbon Copy works over ordinary phone lines using modems. Supports Mac to Mac only.

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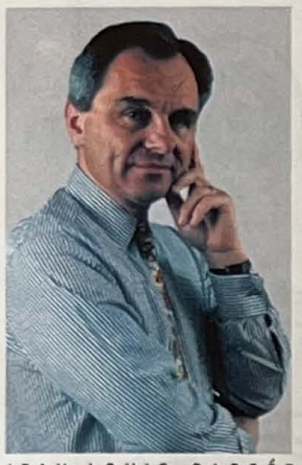


JEAN-LOUIS GASSÉE

Chip architecture makes a difference in the long run. Microcomputer companies should choose a chip vendor with the vision to be more than just a flash in the pan.

Commentary

A good processor chip is hard to find

Does the choice of a microprocessor chip matter? What a strange question! Who could possibly dare to answer with anything but a resounding and obligatory yes, followed by the name Motorola, Intel or IBM.

Rephrased to require more than a knee-jerk response, the question becomes: Is there a correlation between the choice of a microprocessor and the commercial success of the product?

This question is particularly interesting in light of silicon shoppers, including Apple, who are trying to evaluate and bless new processor architectures for their future product lines as well as form strategic alliances with other vendors.

Processors and personal computers. Let's examine a few instances of the relationship between processors and personal computers, beginning with the original Apple II.

Was the Apple II made successful by virtue of its use of the Motorola 6502? It is tempting to say yes. It was a simple, inexpensive microprocessor that gave good throughput for the buck, and above all, you could buy one over the counter and read all the documentation riding the bus home. Or at least that's supposedly why Steve Wozniak decided to use it.

Is it farfetched to assume that the Apple II's fate would have been different had the microprocessor been supported by a competent, resourceful vendor?

Let's ask a related question. Assume for a moment that the Apple II was started on an Intel microprocessor. What would have been different? What the product did wouldn't necessarily have been different. Whatever valid claims of "neatness" are made for the 6502 or the nice programmatic tricks it allowed vs. an Intel processor, programmers on both sides seem to have exhibited comparable degrees of creativity and success in exploiting both devices.

Back to the future. Let's try another, more heretical thought experiment. Imagine for a moment that in late 1979 the relations between Apple and Intel had been a lot better. After all, Apple cofounder Mike Markkula came from Intel, as did the original president of Apple, Mike Scott. Imagine the Lisa group picked an Intel processor rather than a Motorola 68000. Would it have made a difference? Not on the Lisa. Even though its actual processor was admittedly better than any Intel could provide, the machine didn't really work for the application programmer or users.

Whether or not you could have created a Lisa based on the Intel processor of the time is debatable, but there is no doubt that today you can create a Mac on Intel processors.

Initially, Motorola was a good choice. But because of Motorola's ineptness and Intel's skills on the ideological and the technical fronts, the selection is turning out to be a problem as success begets success for the Intel camp.

The choice is yours. So, what does this imply? First, you don't choose an architecture as much as you choose an architecture vendor and its ability to carry you on the crest of the technology wave — or its power to put you back on top if you didn't start there.

Second, ideological terrorism — sometimes referred to as good marketing — works. Reputation and marketing clout often can keep anxious customers at bay and provide engineers with time to catch up.

Third, when generation changes are contemplated — from CISC (complex instruction set computing) to RISC (reduced instruction set computing), for example — and when a company tries to project itself into the future, there is more to do than figure out if today's winner is tomorrow's leader. The heated architectural arguments of yore between, say, the Motorola and Intel addressing models look passé now. Are there any now-fashionable debates headed for the same dustbin?

Lastly, another way to look at vendors is to remember that the companies who successfully lead one generation of technology have difficulties making a successful transition to the following wave. For example, it remains to be seen whether Intel's ferocious dedication to its current architecture will let it have a role in the RISC field.

Is the above any help in trying to assess the titanic embraces or even ménages à trois that are rumored? The exercise is left to the reader. □

MacTOON

"Go ahead — this is the arm Daddy uses to carry his Portable."

The Mac Manager

The Mac's a team player. Big deal ...

"We're Open to Anything." So reads the headline of a two-page ad Apple is running in DOS-biased computer mags. Apple's point is the Mac's compatibility and connectivity to the non-Mac world. That message of me-too connectivity is unfortunate for Mac managers, who instead need Apple to articulate the Mac's unique approach to workgroup and enterprisewide computing.

Wrong message, wrong time. This and other recent Apple ads pay weak lip service to the Mac's superior computing environment. Worse, they extol the Mac's virtues in questionable, even incorrect, terms. Here's an example:

"Apple A/UX lets Macintosh run Unix applications plus thousands of Mac programs. At the same time you can run X Window and MS-DOS applications, and cut, copy, and paste between any of them. No other desktop computer can do this."

Well, that's mostly hogwash, I'm afraid, and it's the kind of ad copy that Mac managers complain about. First, plenty of IBM PCs and compatibles and workstations can run Unix and DOS, and cut and paste between applications in the two environments. Second, it doesn't matter that no authorized PCs can extend that cutting and pasting to the Mac. When you are the competition, and your market share is 10 times Apple's, you don't have to care a lot about running Mac software.

Apple serves up more of the same throughout this text-intensive ad. Consider this exaggerated claim: The "... Macintosh comes out of the box with sophisticated networking capabilities designed right in."

Mac managers know this is stretching the truth. They all have large Ethernet and token-ring internets in their organizations, and they cannot plug Macs into those nets without buying expensive add-on boards and transceivers.

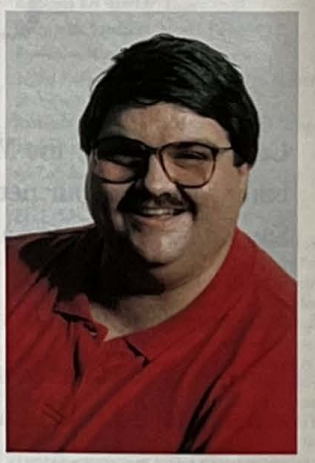
Although Apple's networking protocol set (AppleTalk) *is* sophisticated, its built-in transport mechanism is not. LocalTalk, at 230 Kbps, is not a high-performance network. Apple has been painfully slow in replacing LocalTalk with EtherTalk ports, and Mac managers have had to turn to a myriad of third-party options.

Marketing blunder. The point is that while there's nothing wrong with Apple touting its connectivity options, it has been pushing this message while minimizing the Mac's innovations. And that is a marketing and technological mistake.

It's a mistake that today's Mac managers have to deal with because it trivializes the Mac's strengths in their organizations. Mac managers have enough to deal with, given a general bias in their companies toward Big Blue machines.

It would be nice if Apple's ads articulated the Mac's special strengths, such as its advantages for client/server computing or the fact that it truly can make its users more productive. Compatibility and connectivity are not special; they are "givens" in a mixed-vendor world.

First, the Mac advantage. Apple might like to think the Mac's advantages have permeated corporate America, but that's just not the case. Ingram recently published the results of a study showing the Mac to be clearly superior to its Bluish competitors. Many IS managers who read the report had never before heard this message, or had never seen it presented credibly.



DON CRABB

It's perfectly valid for Apple to promote the Mac's strong connectivity prowess and impressive compatibility options. Those features, after all, help extend the Mac's technological tour de force. But how that capability is advertised will make the difference between a stagnating and a healthy Apple.

Mac managers need their bosses to hear that the Mac advantage of improved productivity just got better with System 7.0, that those advantages extend across the enterprise network, and that companies need the Mac for their own competitive edge.

By advertising that message, Apple can help those Mac managers who have kept the company from becoming another Amiga. □

We might as well tell you right now. The new GatorBox® CS doesn't just compete with other AppleTalk-Ethernet gateways.

It eats them for breakfast.

ANY OTHER GATEWAY WOULD NEVER MAKE IT OUT OF THIS AD ALIVE.

How we attack reliability.

The GatorBox CS is more reliable than even we thought possible.

And as managers of some of the country's largest networks can well attest, we've been known to make some very reliable gateways.

For one thing, there's a generous 2 MB of memory, making GatorBox CS particularly well-suited to high-traffic networks.

And because the GatorBox CS has built-in flash EPROM, it can recover from power outages or network failures quickly and without intervention. (Upgrades are easier too, unlike in other gateways where the system software is stored in ROM).

GatorBox CS Features
Central administration – Configure, upgrade and monitor all GatorBox CS's from a Macintosh anywhere on the network, or monitor from any location via Telnet and SNMP.
Advanced memory architecture – 2 MB of memory store packets and routing, NFS file sharing and print tables. Flash EPROM remembers system software and configuration data through power or network failures.
More reliable design – Features single-board construction, reduced component set and quiet, air-cooled operation.
Built-in hardware diagnostics – Perform out-of-band testing through the dedicated serial port.
Sophisticated AppleTalk and TCP/IP features – Supports AppleTalk Phase 1 and 2, IP tunneling, zone and device hiding, IP subnetting, RIP and SNMP.

Even the housing is specially designed to take the heat off network managers. Thanks to its vertical air flow construction, GatorBox CS runs at substantially cooler operating temperatures.

Of course, its single-board construction means that GatorBox CS has considerably fewer components. Ergo, considerably fewer chances for problems.

A killer support program.

With GatorBox CS, there's a 2-year warranty on the hardware. Not to mention overnight guaranteed replacement.

But most of all, you automatically get the most experienced, most responsive service and support team in the business.

After all, networks can be complex. So if you call with a question, you want people who know how to untangle even the most complicated problems.

The creature comforts.

With GatorBox CS, you can administer multiple gateways anywhere on the AppleTalk or Ethernet internetwork and you can do it all from a single location.

You want to talk versatility? How about GatorBox CS application software. Like GatorShare™ CS and GatorPrint™ CS for Mac-to-Unix file sharing and printing.

There's GatorMail™, our Mac-to-Unix e-mail gateway. And GatorMIM™ CS, a modular adaptation of the GatorBox CS technology for Cabletron's Multi Media Access Center™ (MMAC) intelligent wiring hub.

Plus a full line of Ethernet cards for the Macintosh.

GatorBox CS. You'll wonder how your network ever survived without it. Call **1-800-473-4776**, 617-494-1999 or fax 617-494-9270.

CAYMAN SYSTEMS

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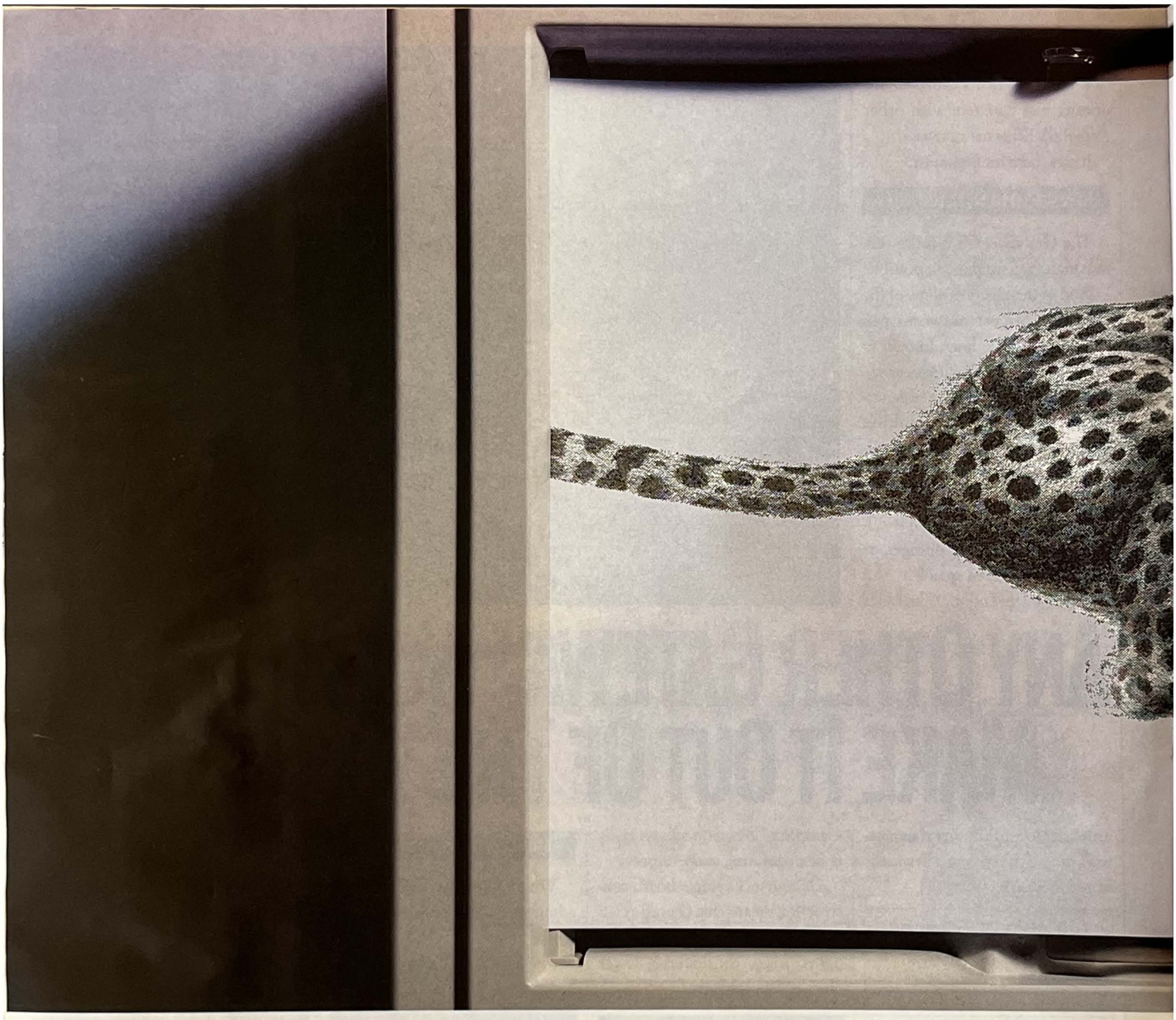

No other laser printer can outrun the

Dataproducts introduces the first 9 ppm animal of its kind with the powerful graphic capabilities of Adobe's PostScript® Level 2 software. And the LZR 960 is the first laser printer to combine Level 2 with a RISC-based controller for speed and agility. The LZR 960 delivers it all in one high performance package. The bottom line: you can print more complex pages in less time. And that's just for starters.

Besides incorporating an entirely new generation of PostScript page description language, our newest laser printer interfaces easily with Macintosh® and IBM PC®-compatible platforms. It also features an HP™ LaserJet™ Series II emulation to handle non-PostScript language applications.

Now that you know what our LZR 960 does, you'll want to know how.

Its PostScript Level 2 software lets you produce sophisticated graphics and output from font-intensive applications significantly faster than with standard PostScript printers. You'll be able to generate and manipulate forms much more quickly by saving them for overlay instead of building them again for each page. And PostScript Level 2 is compatible with earlier versions so there's no need to replace existing application software drivers.

Beyond software compatibility is system compatibility, and here's where the LZR 960 takes the lead again. Apple® and IBM-compatible users can be connected simultaneously through AppleTalk®/LocalTalk/RS-422, RS-232 and Centronics® parallel interface ports. And because the LZR 960 handles port polling so gracefully, printer sharing is easy.

This kind of performance calls for a superior paper handling

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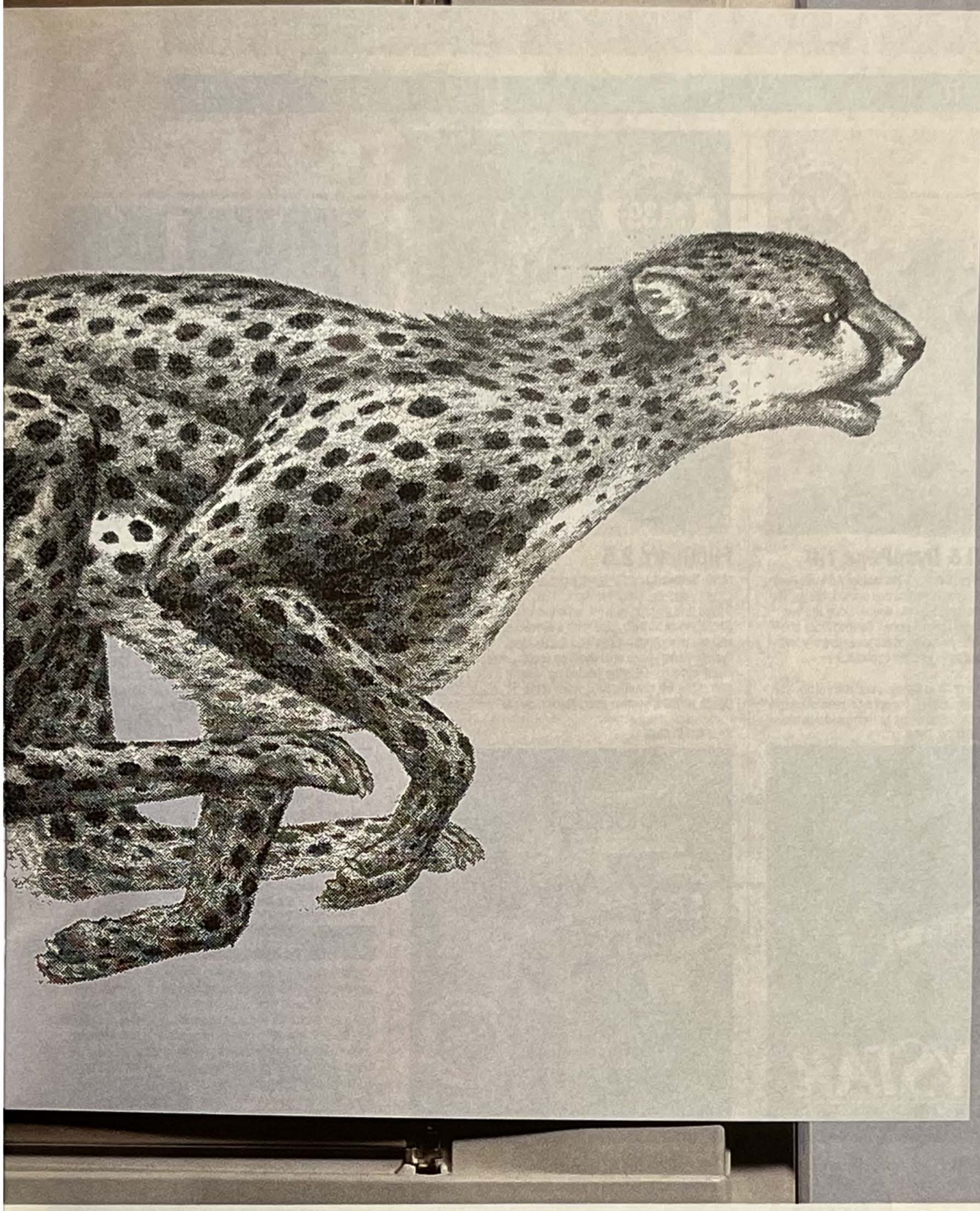

LZR 960™ and still look this good.

system, and that's exactly what has been designed into the LZR 960. It handles letter, legal, A4, B5, statement, executive, envelopes, labels and transparencies with perfect agility, and delivers a maximum 500 sheet capability. An optional cassette feeder allows two different paper sizes to be accessed at once. And an optional high-capacity envelope feeder holds up to 40 business envelopes.

All these paper handling accessories can be operator-installed in seconds without any tools.

What's even more remarkable is that a laser printer can pack this much performance into a footprint of just 1.3 square feet. All told, the LZR 960 sprints past other PostScript laser printers. Call 1-800-624-8999 extension 584 for the name of your nearest dealer.

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Carbon Copy 2.0

(Microcom) Absolutely the best value in remote control. Direct another Mac's screen, keyboard, and mouse from anywhere. Select Single User to access your office computer, or to provide remote support (two copies are required). Select Unlimited Users for affordable remote control on your entire AppleTalk network. Provide local support to other Mac users in less time and with less interruptions. ***FaxFACTS 1753***

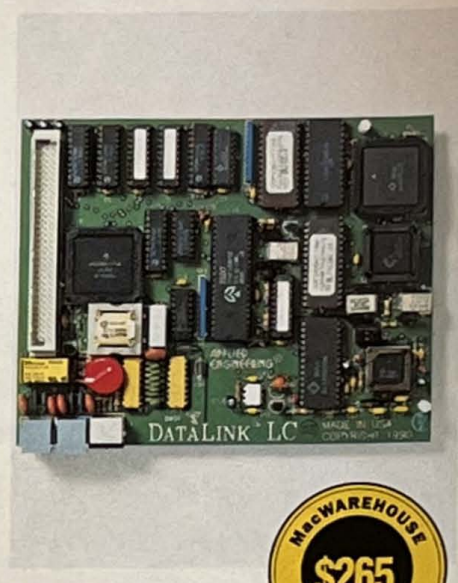
Dynodex 2.0 & DynoPage 1.0

(Portfolio Systems) Dynodex 2.0 –The Instant Address Book 2.0 bridges the gap between onscreen and printed listings. The complete electronic address file prints double-sided address pages, labels, rotary cards and envelopes. Stores names and addresses with up to four phone numbers for each entry and imports and exports text to most other applications. ***FaxFACTS 1510***

DynoPage 1.0– Print any file to double-sided page of any size. Automatically prints spreadsheets, project lists, sales plans, pie charts. Also prints double-sided pages or thumbnail reductions of any document. ***FaxFACTS 2529***

FileGuard 2.5

(ASD Software) "It's Sleek,Fast, and safe. I highly recommend it." MacUser April, 1991. Protect your Hard Drives and Partitions from unauthorized access (including security bypass with a system diskette), copying and erasure; Applications and File/Folders (including system folder) from unauthorized access, deletion, and/or illegal copying; Desktop (including system folder) from alterations by unauthorized user; Keep an eye on System Usage with the system users log which continuously tracks user/group activity.
FaxFACTS 6806



DataLink LC

(Applied Engineering) Save desktop space with the only enhancement your LC needs. The DataLink LC is a Hayes compatible, 2400/9600, data/send-fax modem including an extra serial port, AE's Send-Fax software and more than $200 in on-line time offers. Optional V.42bis transfers data at up to 9600 bps. Add the optional 68882 math chip for faster spread sheet calculations. Upgradeable to receive-fax. 5 year warranty. ***FaxFACTS 5115***

Graflex

(ICD) Graflex connects your Mac to any printer with a Centronics-style parallel interface. Graflex emulates the Imagewriter II on most dot matrix printers, using a special cable with the adaptor interface built in. No bulky power supplies to drag around. Stores the configuration in EEPROM. Great for Mac Portable users, or anyone who travels with a Mac. ***FaxFACTS 4514***

FastCache IIci

(DayStar) Make your Mac IIci 30 to 70% faster with the leader in performance upgrades! The only cache card with all these features; Optimal 64K Static RAM Cache; Proven Compatibility; Upgradable to the PowerCache IIci; Bundled with Powermath software; Conforms to Apple's size standards; Illustrated step-by-step installation manual; Toll-free technical support; Three Year Warranty and 30 day money-back guarantee. ***FaxFACTS 4934***

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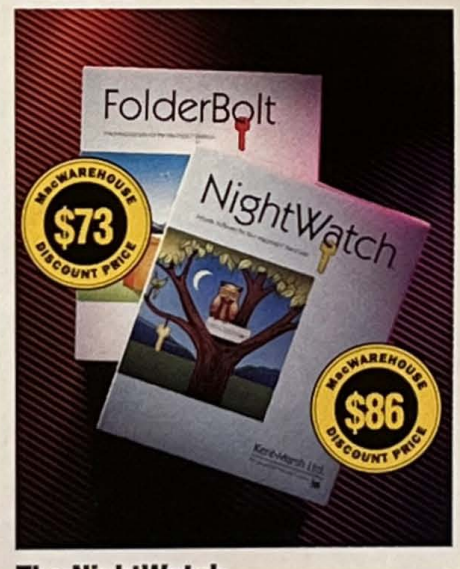
Rating from MacUser Labs



The NightWatch

(Kent Marsh) NightWatch is hard disk security. Protects your hard drive from unauthorized access by unlocking your hard drive *only to approved users*. Simply, it works like your bank teller machine card and is *compatible with any Macintosh hard disk*. ***FaxFACTS 6803***

FolderBolt

FolderBolt provides powerful easy-to-use protection for Macintosh folders-*it's fully integrated into the desktop*. Just double click and it prompts for a password. Includes Read-only and drop folders, Administrator override, application copy-protection, System Folder security and activity logging. ***FaxFACTS 6549***

WKF13

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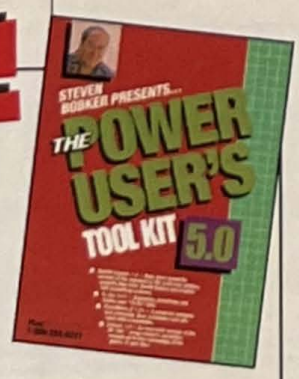

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Reviews

- Comparison: MasterFinder and Mr. File. See Page 54.
- ColorFast. See Page 58.
- Streamline. See Page 58.
- In Brief: digiMatic. See Page 60.

PixelPaint Pro brushed up

PixelPaint Professional 2.0 is a powerful paint program that supports System 7.0 features.

SCORE CARD
PixelPaint Professional 2.0

MacWEEK

Overall value	●
Performance	●
Features	●
Ease of use	●
Documentation/support	●
List price	$799

● Excellent ● Very good ● Good ◉ Average ○ Below average

ON BALANCE
PixelPaint Pro 2.0
SuperMac Software

MacWEEK

This release of PixelPaint Pro adds features that make the sophisticated paint program even better and also make it useful for retouching scanned images. It is the first paint program to thoroughly support System 7.0. SuperMac has done a good job of redesigning the interface and added some unique features, though we would like to see better support for Wacom pressure-sensitive tablets. PixelPaint needs lots of RAM and disk space to perform well.

SYSTEM 7 COMPATIBILITY

PixelPaint Professional 2.0	
Balloon help	Yes
TrueType	Yes
Publish and subscribe*	Yes
Apple events	Yes
32-bit addressing**	Yes

*Doesn't subscribe **According to vendor

By Michael Murie

PixelPaint Professional, having undergone several major upgrades, is one of the most powerful bit-mapped graphics programs. With the release of Version 2.0, PixelPaint adds new features and supports most System 7.0 features.

Installation and interface. SuperMac Software uses Apple's Installer to load PixelPaint on a color Mac with System 6.0.5 or greater, a hard disk, and a minimum of 5 Mbytes of RAM.

The interface has been substantially redesigned, and users will immediately notice the differences. Unlike the older versions, which attached the toolbox to the document window, tools now reside in their own palette. The menus have been reorganized, with visual effects in a pop-out menu within the toolbox. The organization of visual effects is more coherent and is available in one location. The toolbox can be displayed in two forms: a short form, which shows half the tools and has a toggle to show the other half, and a long form, which shows all tools. The long menu is only slightly bigger than the short form, which is for use on 12-inch color monitors.

Drawing coordinates are displayed in a window; the mouse location and size of the current object being drawn also are displayed. The Color Mixer is now in its own window, and all tools work in the scratch area exactly as they work on a real document — a great feature.

New features. Along with an overall reorganization, SuperMac has added lots of new features.

Brightness, Contrast and Color Balance controls have been added and will be appreciated by those working on scanned images.

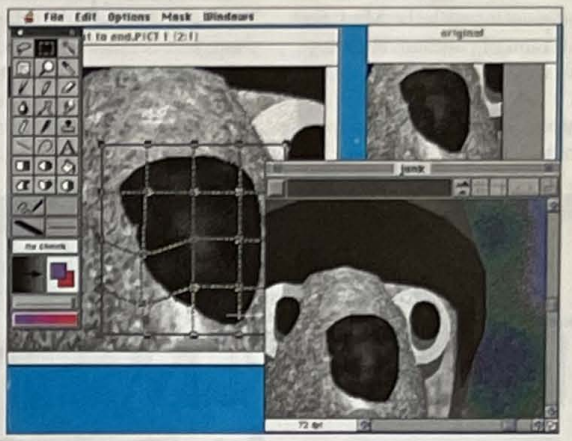
The Paste Control dialog works somewhat like Adobe Systems Inc.'s Photoshop; it provides a dialog box with sliders to define the transparency of the selection when pasted into the document. PixelPaint adds more options to this control with an ink dropper that selects colors transparent to the paste operation, as well as a vignetting control to soften the edges of the selection.

New tools include a Magnifying Glass, Magic Wand, Cropping, Pastel, Charcoal, Rubber Stamp and Bezier tools. The Gradient editing window works much like Electronic Arts' Studio/32's, allowing the user to define a gradient by selecting multiple colors from a palette and arranging them in the desired order.

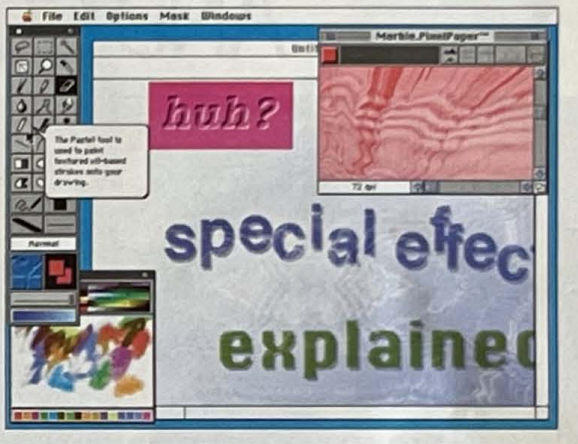
Special distortion. A unique feature not found in other programs is Mesh Wrap. With Mesh Wrap, a grid of points appears in a selected area and they can then be dragged. When finished, Mesh Wrap distorts the selection. This is more powerful than the distort effect available in other products, in which corners of a rectangle are dragged to a new location on the document; while the shape itself is distorted, the edges bear no relation to adjoining parts of the document. Mesh Wrap distorts the interior relative to the pixels in the selection, but the edges remain aligned.

Masks and papers. Masks also have changed. Instead of adding the last painting operation to the mask, now red, green, blue (RGB) and luminance values of a selection can be added to the mask. Along with painting on the mask, an option allows painting on the document.

See PixelPaint, next page



The Mesh Wrap grid can be used to distort a selected area of an image by dragging the points of the grid into a new positions. The Mesh grid (left) was used to create the selective distortion in the window at bottom right.



This image shows PixelPaint's new toolbox, balloon help, color-mixing window and a PixelPaper. The effect of the PixelPaper, when used as a mask, is shown in the main window.

Timbuktu update adds color, better performance

SCORE CARD
Timbuktu 4.0

MacWEEK

Overall value	●
Performance	◉
Features	●
Ease of use	●
Documentation/support	●
List price	$195*

● Excellent ● Very good ● Good ◉ Average ○ Below average

*10-pack, $995; 30-pack, $1,995. Upgrades from v. 3.1, $10-$35.

SYSTEM 7 COMPATIBILITY

Timbuktu 4.0	
Balloon help	No
TrueType	Yes
Publish and subscribe	n/a
Apple events	No
32-bit addressing*	Yes

*According to vendor

By Shelly Brisbin

Unlike many new Macintosh software releases coinciding with the release of System 7.0, Farallon Computing Inc.'s Timbuktu 4.0, a screen-sharing and file-exchange package, is an enhanced product, not just a compatibility upgrade.

Timbuktu's successive versions have brought improved style and flexibility to this sometimes clumsy but inventive genre of applications. Users range from network managers seeking to control and update users' machines to training and support staffs providing remote-control demonstrations and troubleshooting services. This release of Timbuktu works better for sharing graphics and documents among members of a workgroup.

Color me elsewhere. The most obvious enhancement to Timbuktu will make itself apparent on color and gray-scale Macs. The host screen is transmitted at the greatest possible bit depth, and the guest draws the shared screen at its greatest bit depth available. If a 24-bit image is transferred to an eight-bit system, the guest machine maps the higher-resolution image with eight-bit color. The same applies to gray-scale and monochrome Macs.

The most noticeable limitation of Timbuktu 3.1 was its inability to perform background file transfers. The new version allows transfers under the Send Files or Exchange Files options. With Send Files, documents are dropped into a Files Received folder on the recipient's hard disk. Within that folder are other folders named for different senders. The sender also has the option of enclosing files in a new folder, which can be named at the time of transmission. Like many telecommunications programs, Timbuktu displays estimated transfer time in the background. Exchange Files allows the user to retrieve files or to specify a drop folder when

See Timbuktu, Page 53

ON BALANCE
Timbuktu 4.0
Farallon Computing Inc.

MacWEEK

Timbuktu 4.0 now supports color, yet still boasts better performance than its predecessor. The network screen-sharing product allows managers to control and update users' machines as well as share files. For those who need it, its average performance, innovative features, ease of use and good documentation — offered at a reasonable price — add up to a good value.

PixelPaint

From previous page

SuperMac has included painting surfaces called PixelPapers. These are various materials (such as rice paper, linen, canvas and marble) digitized as mask effects. Pasting them into a new document and painting with the Mask feature on gives the illusion of painting on that surface and creates very realistic effects.

Objects and type. Several drawing tools, such as the Rectangle, Circle and Text tools, first display an "object" (an outline representing the created object) on the document. The object can be moved before final placement, which is made by clicking outside the outline. PixelPaint then creates the bit map in the document.

PixelPaint supports both Apple's TrueType and Adobe Type Manager. Like Photoshop, text is entered via a dialog box. The text then appears as an object that can be moved. While in this mode, each letter has a baseline point. Clicking and dragging these points changes the letter spacing and relationship of the characters. Unfortunately, text can be rotated only as a bit map.

System 7.0. PixelPaint is the first paint program to offer System 7.0 support. In addition to TrueType and 32-bit addressing, balloon help is supported, though we felt it was not completely implemented. For example, some of the menu options had terse instructions such as "Open the Gradients dialog," but when the dialog appears there is no balloon help within the dialog to tell you how it works.

The Paste Control dialog lets you specify colors in the artwork to be "dropped out," "protected" or both. These effects control transparency of a pasted object.

A minor refresh problem causes balloon help to erase parts of the screen while a dialog is up. We think SuperMac could have done better, particularly with the Paste Control, which is very hard to understand at first.

PixelPaint allows you to publish an edition for use by another application. Here we encountered two problems. If you send an edition manually but then undo changes to the file, the edition is not updated. Also, when an edition of a large illustration is opened in the Finder, it does not appear on the screen, even though the edition opens normally when brought into another program. Once an edition is created, PixelPaint does not allow you to resize it (though its contents can be changed as desired).

PixelPaint does not support subscribe — no surprise — because that would require treating the edition as an object, and PixelPaint is not an object-oriented drawing program.

The manual is large and complete, with tutorials and several color plates. Unfortunately, between printing the manual and releasing the program, SuperMac made many changes, and 23 pages of release notes accompany the manual. In fact, several of the important new features appear in the release notes rather than the manual. Also, several known bugs in the program are listed. While this might suggest that the program is incomplete, we found it to be stable in our testing, except when working on low disk space.

PixelPaint can read Paint, TIFF, PICT and PixelPaint files, and it can save documents in PixelPaint, PICT, Scitex and Encapsulated PostScript formats. PixelPaint's own format loads quickly, but is extremely large — a 356-Kbyte PICT file occupies 2.2 Mbytes in PixelPaint format. A pop-up menu in the file-save dialog box is used to select the file type, as well as the file's bit depth. The bit-depth option would have been better placed in a separate dialog box after selecting this option.

Surprisingly, PixelPaint doesn't take advantage of the Wacom pressure-sensitive tablet as much as other recent software releases do.

Conclusions. PixelPaint's performance is adequate, but it really needs lots of memory, disk space and processor power to shine. SuperMac has added and improved upon paint features that the competition offers and has provided some excellent new features. While not head and shoulders ahead of other programs, it is certainly equal to or better than most. The new interface may be more coherent, but some features have been moved around for no particular reason. PixelPaint is an excellent paint program, and it has become an attractive solution for retouching scanned images.

SuperMac Software is at 485 Potrero Ave., Sunnyvale, Calif. 94086. Phone (408) 245-2202 or (800) 345-2888, Ext. 84; fax (408) 735-7250. □

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Line Screen: 150 lpi
Gamma Correction: None

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Brightness level: default
Input resolution: 150 dpi
Size: 419K
Output Resolution: 200 dpi
Line Screen: 150 lpi
Gamma Correction: None

Microtek Scan
Original: 8 x 10 color print
Brightness level: default
Input resolution: 150 dpi
Size: 1201K
Output Resolution: 200 dpi
Line Screen: 150 lpi
Color Correction: None

Silverscanner
Original: 8 x 10 color print
Brightness level: default
Input resolution: 150 dpi
Size: 1220K
Output Resolution: 200 dpi
Line Screen: 150 lpi
Color Correction: None

When it comes to selecting the right scanner, be forewarned. There is a difference you can see in black and white. And color. Just look at this comparison between the La Cie Silverscanner and the Microtek 300ZS. Both images were scanned at default settings with no corrections. This entire ad was then created and separated using Adobe Photoshop, Quark XPress 3.0 and a Linotronic 330.

As you can see, Silverscanner produced a better-looking image than the Microtek scan. Silverscanner lets you scan color, gray-scale, halftone and line art with dazzling clarity. La Cie gives you more with OCR compatability, faster color previews, versatile scanning controls and up to 1200 dpi.

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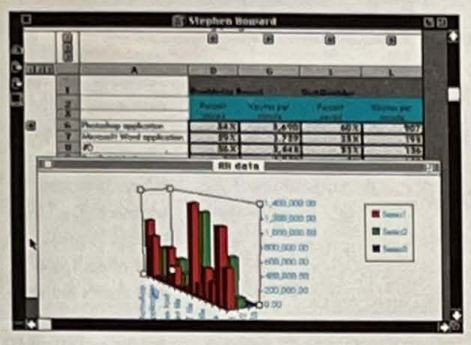
Timbuktu

From Page 51

sending. Each function is controlled separately by Timbuktu's password and access-limitation scheme.

Another new feature, Network Clipboard Exchange, allows hosts and guests to share Clipboard information. Either side of the transaction may initiate an exchange. Unlike file transfer, Clipboard Exchange must be initiated during an active Timbuktu session, and controls are located within the Timbuktu guest



Managers now can monitor other users' machines in full color. Here, an Excel 3.0 graph generated on a host machine is being viewed remotely.

Hosts, network zones and basic features of Timbuktu 4.0 are accessed through this simple control window.

window. Guest windows in Timbuktu 4.0 look much like those in the previous version; the familiar window controls and scroll bars allow flexible window sizing, and an enhanced auto-scrolling feature lets users navigate easily around a window-filled screen. Auto-scrolling is very smooth, but holding down the option key while moving the mouse disables the feature, and a menu option allows you to disable it more permanently.

Security measures. Timbuktu's security has changed little since Version 3.1, except that the Guest Privileges dialog box is easier to understand. Radio buttons have been replaced with check boxes, and the new layout is less confusing than its predecessor. A host can set a variety of access options, including public, group or individual access to some or all privileges. In addition, passwords appear as a string of bullets to help prevent unauthorized access. Farallon says password files also can be used with Timbuktu/Remote, the company's modem-based screen-sharing system.

Compatibility. Timbuktu is ready for System 7.0. It is 32-bit-clean, making it compatible with the new operating system's virtual-memory feature (on Macs whose ROMs allow use of the 32-bit mode). Macs with 68000 and 68020 CPUs, as well as 68030 machines without a PMMU (paged memory management unit), operate at standard 24-bit mode. Apple's TrueType and Adobe Systems Inc.'s Adobe Type Manager scalable font technologies are supported in Timbuktu 4.0. Users will find no balloon help, but they can access a traditional menu-based on-line system.

Installation and documentation. To ease the installation process, whether under System 6.0.x or 7.0, Farallon uses Apple's Installer to load the Timbuktu extensions. A default installation script produces a System 6.0.x-compatible configuration, while a customized script installs a System 7 setup. Farallon said future shipments of Timbuktu will include Apple's Installer 3.2, which provides a more intuitive System 7 installation path.

Timbuktu includes a good manual; on-line help is also available and includes a number of useful pages. But the screens are often incomplete. Given space limitations, the solution might be page-number references within the on-line environment, particularly since the Timbuktu manual does such a good job of explaining error messages.

Conclusions. Any software package that transfers screens of information across the network must be scrutinized for its performance and effect on network traffic, particularly over LocalTalk. Timbuktu's performance seems to have improved over time, even though Version 4.0's color support makes substantial demands on memory and bandwidth. Farallon recommends that transfers of 24-bit-color images be limited to Ethernet networks; LocalTalk is just too slow. RAM is also a factor: 1 Mbyte is needed for black-and-white screen sharing; 2 Mbytes for color exchanges.

Though its performance is average, Timbuktu's features, ease of use and documentation, offered at a reasonable price, add up to a good value.

Farallon Computing Inc. is at 2000 Powell St., Suite 600, Emeryville, Calif. 94608. Phone (415) 596-9000 or (800) 344-7489; fax (415) 596-9020. □

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×			Automount w/Password Prompt
×	×	×	**Hard Disk Optimization**
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COMPARISON

New file utilities take on Finder

MasterFinder a pro, Mr. File falls short

By Henry Norr

It took some daring for a small company to bring a new file-management utility to the Mac market in 1991.

After all, the one bundled free with every Mac — the Finder — has met the needs of most users for years, and even before System 7.0 hit the streets, it was hardly a secret that a vastly improved Finder was just over the horizon.

Yet Tactic Software Inc. chose to defy the odds with MasterFinder, a package it first shipped in January and has since updated several times. Another vendor, Softways, followed suit with Mr. File in March.

The Master basics. MasterFinder ships in two forms: application and desk accessory. The manual urges that users of MultiFinder (and presumably System 7.0) run the application and that those using Finder under System 6.0.x install the DA. We tested both Version 1.1, the release current at press time, and a late beta of Version 1.2, which should be at your dealers by the time you read this review.

The heart of the program is a window called the Pane View. It has four areas, each of which can list the contents of a directory. From this window you can perform basic file-management operations, such as copying, moving, deleting, renaming and launching.

The Pane View was inspired in part by the NeXT Browser. Its behavior does not correspond to the Finder's, and Mac users may find it confusing at first. But MasterFinder includes Preference options that let users adjust the workings of the Pane View and other aspects of the program.

By clicking on a button, you can switch into a Folder View, which offers a more detailed listing of the contents of a single directory. A Get Info option provides even more detail — and a chance to modify type and creator codes — for individual files.

All of this is standard fare for those familiar with older utilities such as CE Software Inc.'s DiskTop and Fifth Generation Systems Inc.'s DiskTools, but the Pane View's multidirectory display makes some management functions easier to do with MasterFinder.

The hot stuff. What really distinguishes MasterFinder, however, is the wealth of useful functions and conveniences unobtrusively built in. To make navigation faster, each pane incorporates a menu, resembling that of Now Software Inc.'s SuperBoomerang, where all recently opened folders and others designated by the user are listed. A separate Launch menu lists selected applications; you also can launch a document with an application other than its creator, change a program's memory allocation on the fly and have MasterFinder shrunk to its title bar when you launch.

Other features include a catalog function, which makes it possible to keep active directories for off-line volumes such as floppies and CD-ROMs, and Network View, which offers an outline view of the structure of a network.

Finding files fast. MasterFinder's most outstanding feature is its fast and flexible file-finding capability. You can search by a variety of criteria and you can save queries for future reuse. You can even perform wild-card searches if you are not sure of a file's exact name.

Searching a 300-Mbyte hard disk on a Mac IIfx took only two seconds, while Finder 7.0 required six seconds, CE's DiskTop took 21 seconds, and Mr. File needed 32 seconds for the same search. Only SuperBoomerang and ON Technology Inc.'s On Location matched MasterFinder's performance.

In your face. MasterFinder blatantly departs from many Mac interface conventions. Some of the differences are trivial; others, such as the use of on-screen scroll arrows instead of scroll bars, are easy to get used to.

Other aspects of the interface are more confusing. Functions available in one view are sometimes not in another where they might reasonably be expected, and the iconic buttons for the disabled functions are not dimmed. Wild-card searching, for reasons that are not apparent, has its own icon, separate from the icon you use to start a regular search.

Given the responsiveness Tactic has demonstrated, we expect to see these glitches cleaned up over time. But in the meantime, be prepared for some false starts and surprises as you plumb the program's depths.

Version 1.2, which was released as this review went to press, promises both cosmetic improvements and some major new features. Along with balloon help, the new release comes with a system extension that supports several new options, such as launching documents into already-open applications. Most important, MasterFinder 1.2 will be able to send and receive Apple events. The feature will enable users to launch applications and process data on remote machines where MasterFinder is installed, Tactic said.

Mr. File just a regular guy. Softways' Mr. File DA is far less ambitious and versatile than Tactic's entry, yet we found its interface even more difficult to get used to.

Like MasterFinder, it represents an advance over previous third-party file-management utilities in that it allows you to see multiple directories at once. But in Mr. File, each directory requires a separate window, and each is cluttered with buttons and other controls. We found our screen soon filling with windows, and the program does not offer a menu of open windows that would make switching easy.

What then does the program offer, compared with the Finder? To judge by the well-written 100-page manual, Softways' pitch is largely to users who are not running MultiFinder or System 7.0. But if you are already running MultiFinder or System 7.0, the Finder is not only free, but always available and easier to use than Mr. File.

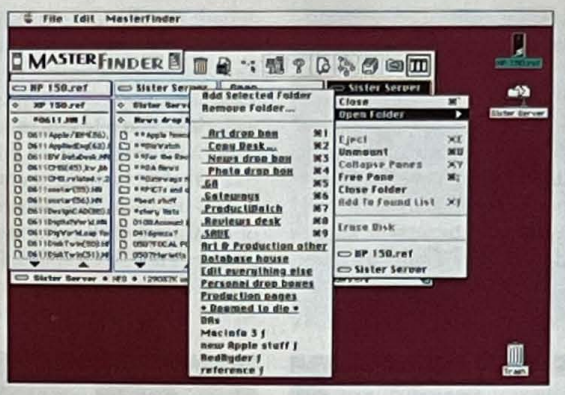
Several of Mr. File's other previously distinctive features also are incorporated into System 7.0. Mr. File provides background copying, but we found that degradation of foreground performance was noticeable enough to discourage us from using the option. Mr. File also lets you set up custom file lists, for launching and project management; System 7.0 lets you do the same with aliases.

One feature unique to Mr. File is that it lets you queue up Erase, Copy and Move, and have the program carry out jobs in sequence in the background while you go on to other work. That capability could be useful for backing up or other batch tasks, but we were put off by an accompanying interface feature: A "traffic signal" in each window is supposed to tell you the status of each task, but we found it hard to keep the meaning of some of the signals straight.

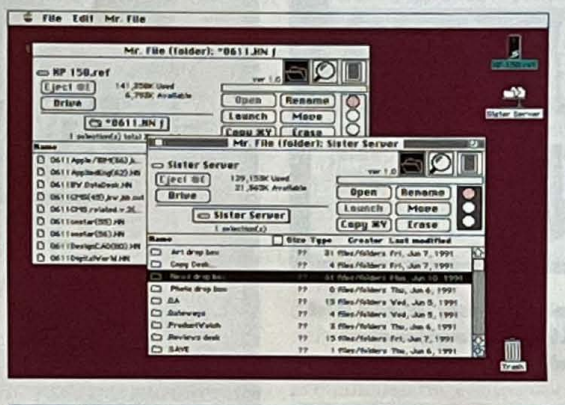
Conclusions. Altogether, MasterFinder combines an array of powerful and useful features with impressive performance. And although the interface needs some work, the program's wide scope does not make it overwhelming. At $99, we think it's an excellent value.

We can appreciate what Softways is trying to do, and the well-written and enthusiastic manual left us with a positive feeling about the company. Had Mr. File appeared a year or two ago, it would have been a modest but real breakthrough in functionality.

But in the age of Finder 7.0, and with Tactic's much more powerful program available at the same price, we can't recommend Mr. File for most users. □



MasterFinder's Pane View can list the contents of up to four folders simultaneously. Version 1.1 includes a menu that lets users move quickly to frequently or recently used directories.



Softways' Mr. File desk accessory lets users see the contents of various folders in separate windows. The "traffic light" at the right of each window shows the status of background copying and moving operations.

ON BALANCE

File-management utilities

MacWEEK

With the advent of System 7.0's improved Finder, it's surprising that two companies have released new file-management utilities to supplement its function. One offers genuine value, even under MultiFinder and System 7.0, but the other is too little and too late.

▸ **MasterFinder 1.2** from Tactic Software Inc. offers simultaneous listings of multiple directories, a blazing-fast file finder and a host of other useful features, even for System 7.0 users. The interface can confuse, but the product gets very good support via CompuServe, and updates have been frequent and free. The program has generated justifiable excitement among utility users.

▸ **Mr. File 1.0,** a multiwindow DA from Softways, offers background copying and custom file lists, but its windows are cluttered and sometimes confusing, its performance is unexceptional, and its distinctive features are available free in System 7.0. Despite an excellent manual, it doesn't compare to MasterFinder.

SCORE CARD

File-management utilities

MacWEEK

Categories	MasterFinder 1.2	Mr. File 1.0
Overall value	●	◉
Performance	●	◉
Features	●	◉
Ease of use	◉	◉
Documentation/support	●	○
List price	$99	$99

● Excellent ● Very good ○ Good
◉ Average ○ Below average

SYSTEM 7 COMPATIBILITY

Features	MasterFinder	Mr. File
Balloon help	Yes	No
TrueType	n/a	n/a
Publish and subscribe	n/a	n/a
Apple events	Yes	No
32-bit addressing*	Yes	Yes

*According to vendor

Product Info

TACTIC SOFTWARE INC.
MasterFinder 1.1 and 1.2: $99
11925 S.W. 128 St., Miami, Fla. 33186
Phone (305) 378-4110 or (800) 344-4818; fax (305) 232-7467

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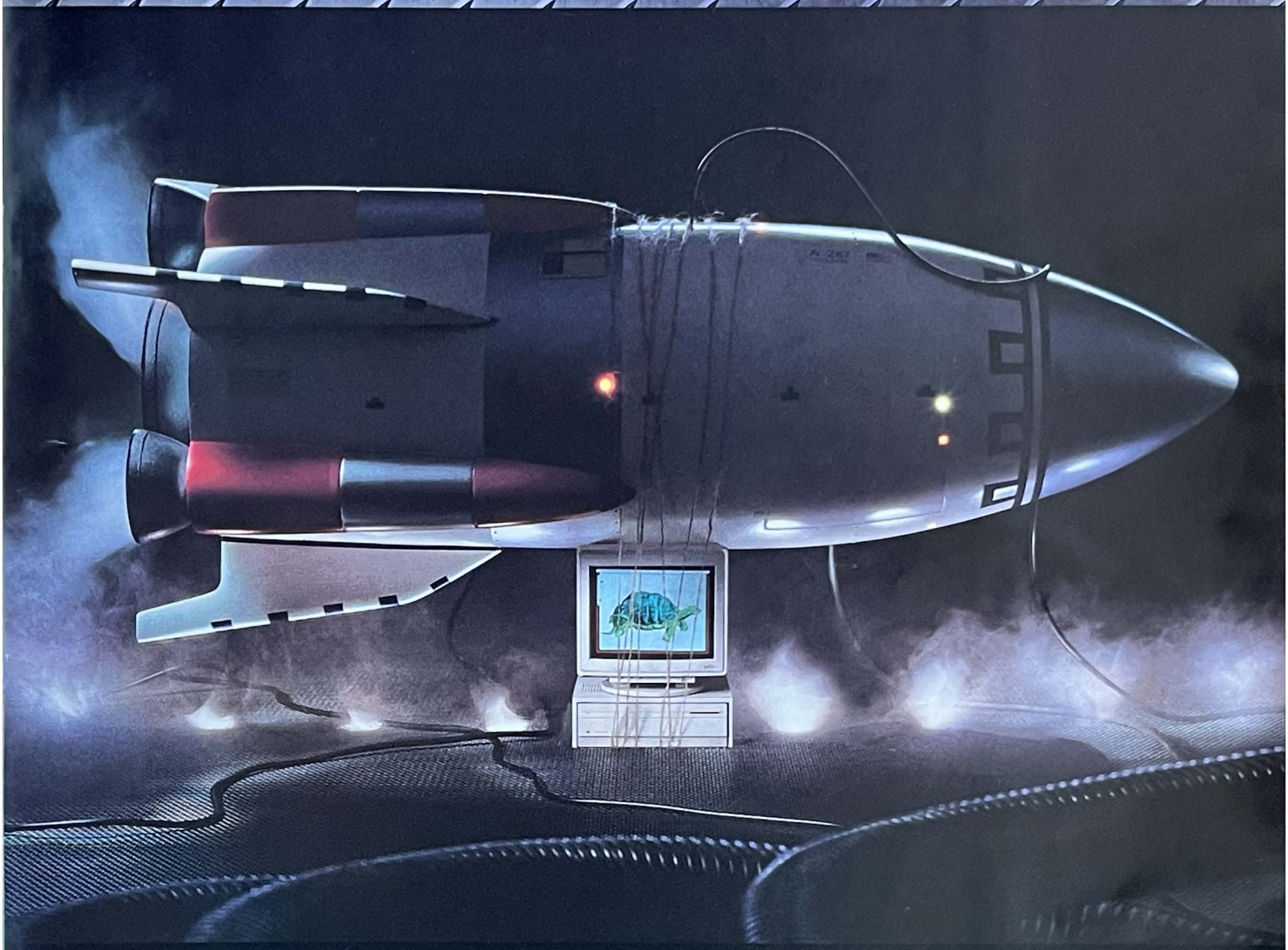

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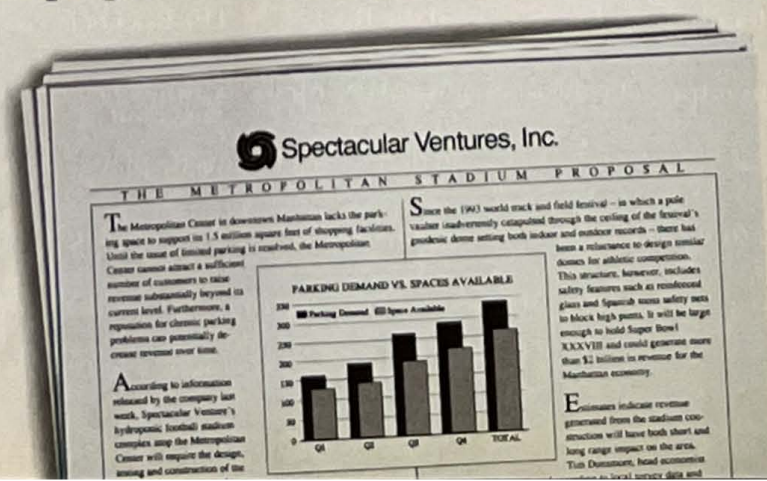

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HEWLETT PACKARD

ColorFast slides into the market

GCC film recorder relatively low-priced

By Eric Benson

GCC Technologies Inc. is now shipping ColorFast, its entry into a slumbering Mac film-recorder market. The relatively low-priced ($5,999) desktop digital film recorder, built by Polaroid Corp., ships with a Polaroid Instant Pack Film back, an instant 35mm processor, a slide-mounting kit, a mini-overhead enlarger and samples of seven types of Polaroid film — everything you need to create images of slides on the desktop. In fact, we found that the ColorFast can make slides with minimal effort.

Out of the box. The ColorFast is a small machine, measuring just 7 by 8 by 16 inches and weighing 16 pounds. Setting up is easy; the unit connects directly to the Mac's SCSI port or to an external SCSI device with the supplied cable and terminator. A rotary switch on the back allows for quick SCSI ID changes. Having to choose which camera back to use may be the only thing you'll have to think about when setting up. Both the 35mm and the Instant Pack Film back are easy to attach and change around, making the ColorFast flexible for the average user. To use the ColorFast, you'll need a color Mac with a hard disk and at least 4 Mbytes of RAM. System 6.0.5 or later and Version 1.2 of 32-bit QuickDraw are also required.

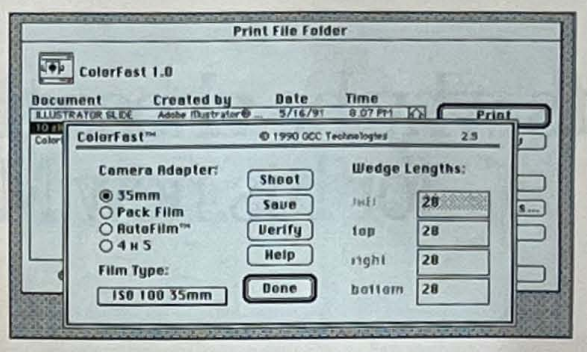
The ColorFast user manual is clearly written and illustrated, allowing even a novice to be up and running quickly. Readers are introduced to features, given basic terminology, and then led through detailed descriptions of each stage in setting up and using the ColorFast. Loading and maintenance of the unit are clearly described.

Software is crucial. GCC decided to let the Mac do all the graphics processing via software, rather than build redundant capabilities into the ColorFast. This decision allows for faster and more-accurate results but also ties up the Mac during printing. Software installation is handled using the GCC Installer. The ColorFast includes a Print Manager application, six high-quality outline fonts, a print driver and a system extension. The software takes almost 3 Mbytes of disk space, and GCC recommends another 3 Mbytes of free space for processing slides.

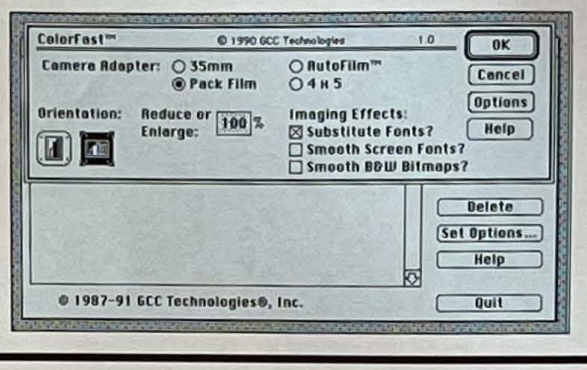
The image. Creating a slide begins with selecting the ColorFast print driver icon in the Chooser. The Print command can be used from within any Mac application. All the information needed to produce a slide is then stored on the Mac's hard disk. GCC's software uses the graphical processing power of the Mac, working hand in hand with 32-bit QuickDraw. Because the ColorFast depends on QuickDraw for its power, as enhancements are made to QuickDraw, the ColorFast will take advantage of them immediately, without expensive upgrades. Apple's LaserWriter LS and GCC's Personal LaserPrinter are two printers that already work this way.

Printing with ColorFast. The software interface for the ColorFast print driver and Print Manager application are equally impressive for their power and ease of use. Because the ColorFast uses a printer driver, like the LaserWriter and ImageWriter, access through the Page Setup command is the same. Being in familiar territory makes the new print options less intimidating for beginners. Page sizes include 35mm, Pack Film, AutoFilm and 4 by 5 inches. The standard orientation and Reduce and Enlarge choices are present, as are font substitution and bit-map smoothing. Page setup also allows pair kerning and track kerning, which are limited to the three choices of normal, tight and very tight. Pair kerning achieves respectable results. Kerning in

See ColorFast, Page 60



ColorFast supports a variety of film formats and film backs. Choosing and exposing a film involves only a few simple selections in a dialog box.



The ColorFast print manager dialog box, mimicking a standard print dialog, will be familiar to Mac users.

SCORE CARD
ColorFast

Overall value	●
Performance	●
Features	●
Installation/configuration	○
Compatibility	●
Documentation/support	●
List price	$5,999*

● Excellent ● Very good ○ Good
◉ Average ○ Below average

AutoFilm back, $499; 4x5 film back, price not available, IBM PC interface, $599

ON BALANCE
ColorFast
GCC Technologies Inc.

The ColorFast film recorder makes high-quality instant slides from Mac images. Imaging speed and slide quality are very good, rivaling more-expensive units from other manufacturers. The current version of ColorFast's software relies on the Mac's 32-bit QuickDraw for color generation. The documentation is complete, and toll-free telephone support is available. The price, variety of film support and easy-to-use software make it a good value.

SYSTEM 7 COMPATIBILITY

ColorFast 1.1	
Balloon help	No
TrueType	Yes
Publish and subscribe	n/a
Apple events	n/a
32-bit addressing*	Yes

According to vendor

Adobe's Streamline 2.0 converts bit maps to line art

By Bruce Fraser

Adobe Systems Inc.'s Streamline 2.0 is a one-trick pony, but it's quite a trick. The program automatically converts bit-mapped black-and-white or gray-scale images into Illustrator PostScript (Encapsulated PostScript), PICT or DXF images that can be edited. It can convert one image at a time or an entire folder of images in a batch mode.

While Illustrator 3.0 contains an Auto-trace tool — as do Aldus FreeHand 3.0 and Silicon Beach Software's Digital Darkroom — Streamline goes well beyond the auto-tracing of any of these programs. It offers far more control over the process, but at the expense of a considerable learning curve. Streamline has three conversion methods, each suited to a particular type of image. You can use each method on its own or combine two methods.

Outlines and Centerlines. The Outline method draws lines around shapes, filling black areas as necessary. It is designed to handle images that contain filled areas and inconsistent line weights, such as clip art and design elements. The Centerline method draws lines along the center of the lines in the original art. It is intended for technical illustrations that contain consistent line weights and no fills. The Line Recognition feature recognizes and straightens horizontal and vertical lines that are skewed less than 5 degrees, and it ignores any other elements in the artwork unless you combine them with one of the other methods. It is meant to convert forms, charts, graphs, and any other image composed of horizontal and vertical lines.

You can adjust the tolerance for Outline and Centerline, controlling how closely the traced image conforms to the bit map, as well as the Line Attributes setting, which controls whether long lines are interpreted as straight lines or as flat curves. The default setting interprets both straight and curved lines, but if an image contains only straight lines or only curves, you can adjust the setting accordingly. You also can reverse the image, select a part of it for conversion and erase parts of the bit map before conversion. To select a non-rectangular area for conversion, you can hold down the Command key and drag to select any shape.

The Line Recognition method has no further options. The Outline method has a noise-level setting from 0 to 1,000 pixels. Areas that are smaller than the noise level are ignored during the conversion process — primarily useful for eliminating stray pixels from scanned originals. The default setting is 8. Increasing the value makes Streamline ignore larger areas — useful when you want to capture only broad outlines — while reducing it makes Streamline convert smaller details.

The Centerline method produces converted images that contain only stroked paths, and the manual recommends it for images with line weights up to 6 points. For heavier line weights, Adobe recommends combining the Outline and Centerline methods. The Number of Steps option determines how Streamline approximates the center of a line when it converts using the Centerline method. It doesn't affect the point size of the line produced; rather, it influences the number of control points the converted line contains. Finding the correct setting will require a thorough read of the manual and probably some trial and error until you get the hang of it.

The Uniform Line Weight option

See Streamline, Page 62

SCORE CARD
Streamline 2.0

Overall value	●
Performance	●
Features	●
Ease of use	◉
Documentation/support	●
List price	$199

● Excellent ● Very good ○ Good
◉ Average ○ Below average

ON BALANCE
Streamline 2.0
Adobe Systems Inc.

Streamline 2.0 converts bit-mapped or gray-scale images to PostScript, PICT or DXF files that can be edited. Options provide fine control over conversion, but it takes time to learn to use these. Inexperienced users can create Illustrator files that are too large and complex to print. We were able to run the program under System 7's 32-bit mode, but Adobe says that Streamline 2.0 is not 32-bit-clean. Streamline is valuable, but it's not for casual users.

SYSTEM 7 COMPATIBILITY

Streamline 2.0	
Balloon help	No
TrueType	n/a
Publish and subscribe	No
Apple events	No
32-bit addressing*	No

According to vendor

After 20 Million Pages Of PostScript Color Output, The Last One Looks As Great As The First.

MacWorld World Class Award
September 1990

PC Magazine Editors Choice
November 14, 1989

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- HP-GL® emulation software included

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IN BRIEF

digiMatic

Utility digitizes points from printed charts

Digitizing points from printed charts, tables and maps is a chore at best. A new utility, Famous Engineer Brand Software's digiMatic, aims to make the process as simple as possible.

digiMatic is an Apple menu item that lets you define points on a graph by clicking. Using any paint or drawing package, you open an image (scanned or otherwise) and define maximum values for the x and y axes. The program then finds the origin and the coordinates of any point you select. As you move the mouse, you can see the x and y coordinates change in the Record window, making it easier to place equally spaced points on a line. If a scanned image is skewed, you can also manually define the origin and the points will be corrected. Both log and linear axes can be used.

While you can select points in any sequence, a Sort feature can put the resulting data in x or y order, which is especially useful for time-series data. You also can start and stop point recording at any time and resume later.

Sets of points are kept in a window where they can be edited. You can save data as text or as bitmapped or PICT files to import into other programs, such as graphing packages.

Accuracy depends on how large the image is and how small and precise the original dots are, in addition to your manual dexterity. Results will be much more precise if you blow up a graph before digitizing points from it. Digitizing tablets and cross-hair cursor attachments help too, although they aren't necessary. The short but clear manual offers many useful suggestions on how to digitize graphs when you don't have access to a scanner.

digiMatic, priced at $229, takes a totally different approach than Tree Star Inc.'s FlexiTrace (see MacWEEK, March 19), which automatically traces scanned-in graphics as bar, line or area charts. With digiMatic, points on graphs are selected manually. While this may at first seem like more work, by the time a graph is cleaned up for use with FlexiTrace and the inevitable corrections are made to the output data, the two methods come out nearly even. In fact, our ideal numerical digitizing package would combine elements of both, switching between automatic and manual modes as appropriate.

digiMatic has the edge for those whose graphs do not contain too many points and when scanned originals are fuzzy at best. It's also a real boon to programmers who need to define screen regions.

Famous Engineer Brand Software is at 4855 Finlay St., Richmond, Va. 23231. Phone (804) 222-2215; fax (804) 226-1934.
— *By Becky Waring*

ColorFast

From Page 58

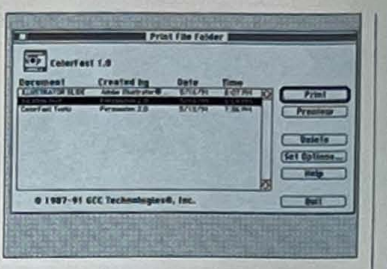
applications such as Aldus PageMaker will take precedence over ColorFast's kerning.

Batch-processing software. ColorFast's Print Manger is a simple program and can be used to batch process slides created with different applications. It also can overcome memory limitations caused by extremely large slide files that will not print from memory-intensive programs. Print Manager's window lists all the files in a special folder used to hold saved slide files, showing the date and time of creation. All of ColorFast's Print and Page Setup options are available in Print Manager, as are new ones. Two quality-control operations are included: One lets users calibrate the ColorFast to different types of film (image creeping can occur when switching between 35mm and Instant Pack film); the other operation tests for CRT luminance. This feature comes in handy when you try to determine whether the ColorFast is warmed up sufficiently to produce a high-quality slide.

Software fonts. ColorFast's high-quality outline fonts were developed by Bitstream Inc. of Cambridge, Mass. Fonts include Courier, Symbol, Helvetica, Times, Zaph Calligraphic and Swiss Narrow. All these fonts are interchangeable with their PostScript counterparts. Slides can be formatted using PostScript screen fonts, and the ColorFast will automatically substitute the appropriate high-quality version when printing. Additional Bitstream high-quality font families are also available. Users of PostScript fonts can take advantage of Adobe Type Manager, which is fully compatible with the ColorFast.

Conclusions. GCC's ColorFast is a solid performer, both in quality and speed. Because GCC chose to use QuickDraw graphics processing, it is one of the lowest-priced desktop digital film recorders available today and a good value for the money. Tests showed ColorFast can produce slides rivaling service-bureau quality, with speeds as fast as any desktop film recorder in its price range. Our test slides took an average of five minutes each to produce images at 4 Kbytes and two minutes at 2 Kbytes. Color saturation is excellent, and blending of graduated colors is very smooth, largely because of the 3-inch CRT used in the ColorFast. Although the unit is marketed as a personal film recorder, its features and performance would make it a valuable asset for any company department needing fast turnaround on high-quality slides or instant prints.

GCC is at 580 Winter St., Waltham, Mass. 02154. Phone (800) 422-7777; fax (617) 890 0822. □



ColorFast Print File Folder allows you to select images for outputting to film in batch mode.

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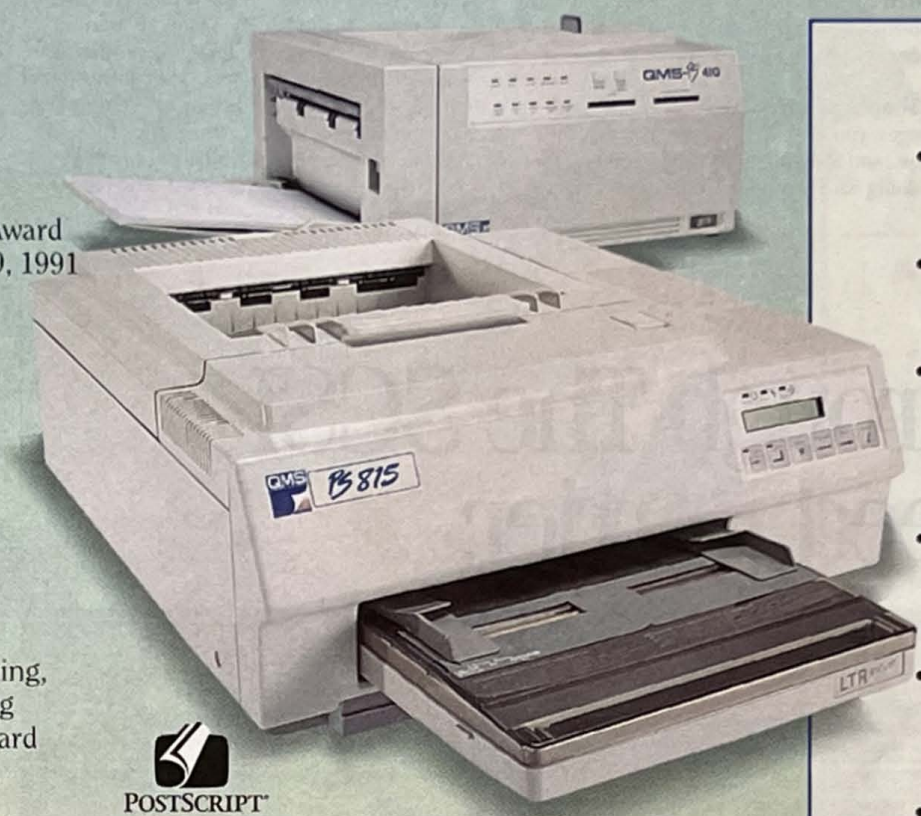
PC/Computing, Most Valuable Product, November 1990

BYTE, Editor's Product Merit Award, January 1991

Personal Publishing, 1990 Outstanding Achievement Award



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*patent pending

Streamline

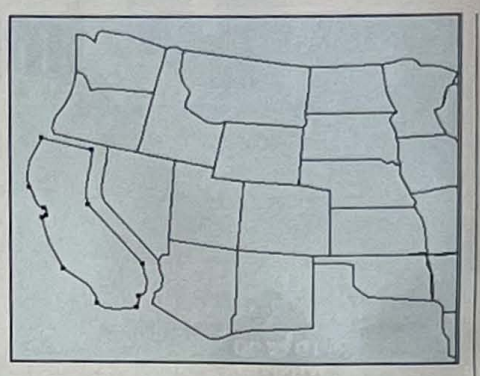
From Page 58

lets you select a specific line weight for the converted image. If you're combining the Centerline and Outline methods, only those lines that are centerlined are affected. If you leave this option unchecked, Streamline approximates the line weights of the original image.

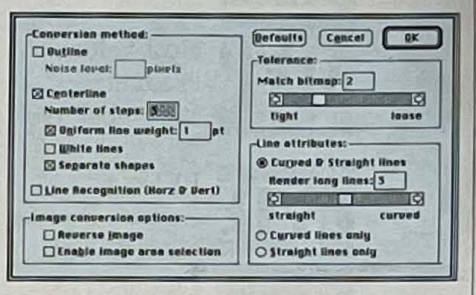
A separate state. The Separate Shapes option determines how Streamline deals with shapes that have shared borders. For example, if you trace a map of the United States, checking the Separate Shapes option produces a conversion where each state is a separate path, and the shared borders are converted twice, once for each state. When this option is unchecked, the border between states is a single line.

Shades of gray. To convert gray-scale images, you must first convert them to bit maps, and Streamline provides three methods of doing so: Threshold, Contrast and Posterize. The Threshold method lets you specify the gray level above which Streamline will convert all pixels to black. The remaining pixels are converted to white, and Streamline traces and fills the resulting image as a black-and-white silhouette. The Contrast method produces a conversion containing only stroked paths, with no fills. You specify a contrast-level setting as a percentage. Streamline then examines the image and converts to black those pixels that contrast with the adjacent pixels by more than the set contrast level. The higher the percentage specified, the fewer black pixels result. The Contrast method essentially converts gray-scale images to line art.

The Posterize method first posterizes the gray-scale image into four, eight or 16 levels of gray, then converts the image into paths filed with the appropriate shades of gray.



Streamline's Separate Shapes option, used with the Centerline option, traces each state traced as a closed path.



Streamline's Conversion Setup dialog box lets you choose from three different methods of conversion and set parameters to handle a wide variety of images.

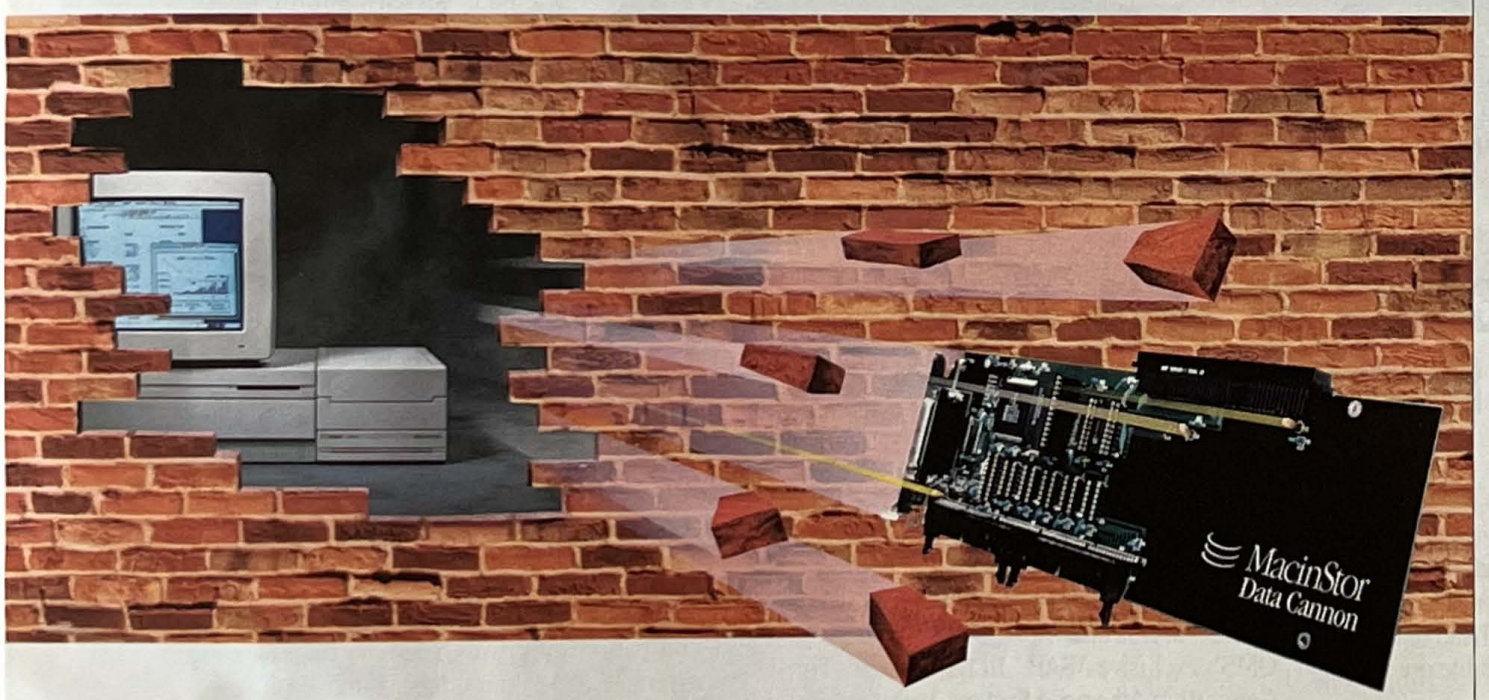
The learning curve. With the wealth of options the application offers comes a long learning curve. The wrong settings can easily produce an Illustrator file that is so large that you'll have difficulty printing it or, in extreme cases, even opening it. The black-and-white images that convert best are those with areas of solid black and solid white. If the bit-mapped image contains patterned or gray fills, you may want to erase them from the bit map before you convert. Otherwise, you can end up with a large number of elements in the converted file.

Converted files often need some cleanup work, and here, too, there are problems. The conversion process rarely makes the same decisions that human artists would make if they were tracing the image, and as a result, the cleanup work isn't always as easy as we would like. Judicious editing of the bit maps before conversion, combined with careful selection of the right settings and methods, go a long way toward helping this.

Conclusions. Streamline is a specialized tool. If you typically spend a great deal of your time tracing bit-mapped images in Illustrator or a similar application, Streamline may be valuable, particularly in a production setting. The Batch Conversion option lets you convert images unattended, so you could let Streamline convert a folder of images overnight. If you're the kind of artist who likes to start with rough pencil sketches that you then scan and use as an Illustrator template, Streamline can be really handy. But for most users, the investment of time and energy required to get the best results will likely prove daunting. If you have only an occasional need to trace bit-mapped images, you'll probably be better served using a combination of the existing auto-trace tools and manual tracing.

Adobe Systems Inc. is at 1585 Charleston Road, Mountain View, Calif. 94039-7900. Phone (415) 961-4400; fax (415) 961-3769. □

Blast Through The SCSI Speed Barrier.



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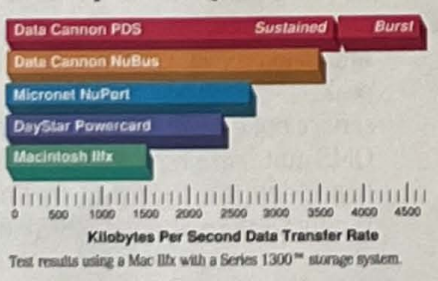

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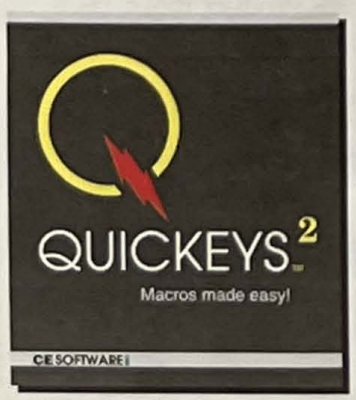

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PRODUCT WATCH

- Buying info
- Expert advice

Fitting the pieces together: Using Adobe software with System 7.0. See MacinTouch.

QuickDraw printer options growing

ATM and TrueType raise quality of inkjet and dot matrix; laser prices come down

By Clay Andres

For high-quality office printing, lasers are ideal and PostScript is the standard. But PostScript laser printers that can be hooked up to a network have been too expensive for single users and the non-networked situations that exist even in companies with extensive networks. However, the combination of inexpensive QuickDraw-driven printers with outline fonts provided by Adobe Type Manager and TrueType may now address those needs not filled by network-able PostScript printers.

QuickDraw-driven laser, inkjet and impact printers are available for $600 to $1,500. The processing is done in your Mac, not in the printer, and with ATM or TrueType you don't have to give up print quality or document compatibility. And for limited printing loads, the price is right.

Hewlett-Packard Co.'s DeskWriter, a quartet of printers from GCC Technologies Inc. and Eastman Kodak Co.'s Diconix have all been available for some time. And prices are falling because, as of March, Apple will be aggressively courting personal-printer buyers with its StyleWriter ($599) and Personal LaserWriter LS ($1,299).

Laser. The Personal LaserWriter LS is a model of low-cost engineering. It uses inexpensive custom-designed silicon instead of a general-purpose processor. Rapid compression/decompression techniques and a special chip on its serial-port connection speed up printing.

While many analysts predict that the LS is priced low enough to sell well, others think the market for personal lasers just isn't there.

"Personal laser printers give you LaserWriter output, but there are so many limitations in terms of speed and how they're connected," said Peter Hartsook, manager of Macintosh research at International Data Corp. of Mountain View, Calif.

"You need some printer output device wherever you have a machine. But in an office where you have an 8-page-per-minute printer down the hall, do you actually need a 4-ppm personal printer in your cubicle?"

In anticipation of Apple's introduction of the LS, GCC lowered the price of its PLP II and PLP IIS to $999 and $1,499, respectively. (The IIS has a print engine rated at 8 ppm instead of 4 ppm like the II and LS.)

"The PLP does 99 percent of what my clients need at a price that nothing else approaches," said Jon Shulman of Shulman Consultancy in Chicago. "The PLPs tend to go into executives' offices. And with the advent of ATM a year ago, there are no longer any compatibility issues with their PLPs at home or PostScript printers in the office."

However, although ATM and TrueType provide quality type, QuickDraw still can't deliver graphics with the same facility as PostScript.

Inkjet. For laser quality on a budget, there are also inkjet printers. They are slower and the output is not as crisp, but they cost a fraction of what laser printers cost.

Inkjet printers are well-suited to the non-PostScript printer market. Quiet and often quite compact, they have become more reliable over the years and no longer require special long-fiber paper. But the ink does bleed slightly, making their output less sharp than laser output.

Apple's StyleWriter prints at 360 dpi, the highest resolution of any personal printer. "The StyleWriter is a killer product," said Stewart Alsop, editor of P.C. Letter. "It's slow, but it's the price of an ImageWriter." In fact, the StyleWriter is likely to replace the ImageWriter as the volume leader among Apple's printers.

Until this year, HP's DeskWriter was the only way to get 300-dpi resolution for less than $1,000. (HP lowered the price to $729 as of May 1.) According to Alsop, the DeskWriter has sold better than any other non-Apple printer in the Mac market, and even though he said its market share is threatened by the StyleWriter, he expects it to retain a loyal following.

The DeskWriter is big compared with the StyleWriter, and the type quality isn't as sharp at small point

See Printers, next page

QuickDraw printers

	PRINTER	PRICE	PPM	DPI
Laser	GCC PLP IIS [1,2]	$1,499	8	300
	Apple Personal LaserWriter LS	$1,299	4	300
	GCC PLP II [1,2]	$999	4	300
Inkjet	HP DeskWriter [3]	$729	1	300
	Apple StyleWriter	$599	0.5	360
	Kodak Diconix M150 Plus [4,5]	$549	0.5	192
	GCC WriteMove [1,5]	$399	0.5	192
Impact	GCC WriteImpact [1]	$699	0.5 to 4 [6]	360 x180
	Apple ImageWriter II	$595	1	144

[1]*Includes utility software* [2]*Includes SCSI interface* [3]*With AppleTalk* [4]*With ATM* [5]*Battery option* [6]*Depending on quality mode*

PriceWatch
PERSONAL PRINTERS

Item	List price	Street price	Source
APPLE			
Personal Laser Writer LS	$1,299	$995	Connecting Point
StyleWriter	$599	$510	Miami
GCC TECHNOLOGIES			
BLP Elite	$1,599	$1,549	ComputerWare Palo Alto, Calif.
HEWLETT-PACKARD			
DeskWriter	$729	$470	Inacomp Computer Ctr. Chicago
EASTMAN KODAK			
Diconix M150 Plus	$549	$499	Heath/Zenith Computers Baltimore

Low-cost printers getting on networks

The low cost of personal printers has made it nearly impossible for manufacturers to offer them with PostScript or AppleTalk, features that businesses have most wanted in their printers. But those days may be over.

AppleTalk. Hewlett Packard Co.'s DeskWriter comes with an AppleTalk interface, and Apple sells an AppleTalk adapter for the ImageWriter. But now, with Shiva Corp.'s $399 NetSerial, almost any serial printer can be attached to an AppleTalk network.

The Boston Computer Society wanted all its Macs to have access to its new StyleWriter. "The NetSerial allows us to make the StyleWriter maximally available, and we can check compatibility from any Mac," said Mike Costello of the BCS. "For our situation, maximum connectivity is required."

Costello uses SuperLaserSpool with the NetSerial and StyleWriter because a slow printer on a busy network can keep a Mac tied up for too long.

Insight Development Corp., working with Novell Corp., has developed a network printing product that began shipping early this month.

Mosaic for Macintosh lets Macs using Netware for Macintosh on Novell networks to spool print jobs to either PCL-driven printers or PostScript printers on the network. Access to the printer of choice can be made through the chooser.

PostScript. While GCC Technologies Inc.'s newly introduced BLP Elite ($1,599) costs more than personal printers, it is $400 less than its own BLP II PostScript printer, the former price leader.

While the marking engine is the same as that in the BLP II, GCC redesigned the controller board using less expensive custom-designed gate arrays. "We focused on the Mac customer," said GCC Product Manager Bruce Bradshaw, "and were able to leave out all PC emulations that were included with the BLP II." — By Clay Andres

Printers

From previous page

sizes. But a MacWEEK review (see MacWEEK, March 26) found it to be twice as fast as the StyleWriter.

It's also the only personal printer to come with an AppleTalk interface (see story, previous page), which can make it possible for two or three Macs to share a DeskWriter. The most compact and least expensive of all printers are the Kodak Diconix M150 Plus ($549) and GCC WriteMove ($399). GCC gets its printer from Kodak, so they are physically and operationally the same.

But Kodak ships the M150 Plus with ATM, while GCC bundles a suite of utilities and its own driver software. Both printers can be run on batteries.

"We have a Diconix that we use with the Mac Portable," said Mike Costello, meeting director for the Boston Computer Society • Macintosh Users Group. "When the Diconix first came out, 192 dpi [in a non-laser printer] was something to write home about. And you can fit it in the Apple-supplied case [for the Portable] without even straining the zipper."

Dot matrix. The ever-decreasing price of lasers and improving technology of inkjet has relegated dot-matrix printers to the role of printing multipart forms. Like other technologies, however, dot matrix printers benefit from ATM and TrueType. Apple's 144-dpi ImageWriter II ($595) is reliable but cannot match other printers for output quality. If you're serious about printing forms, GCC's wide-carriage WriteImpact ($699) has more paper-handling options than the ImageWriter, and at 360 by 180 dpi, offers higher quality.

Links to non-Mac printers. For those managers with an installed base of non-Mac printers, there are products that connect those printers to Macs.

GDT Softworks Inc.'s PrintLink Collection includes QuickDraw drivers for a number of dot-matrix printers, including those from Epson America Inc., Toshiba America Information Systems Inc. and NEC Technologies Inc. The company's JetLink Express product does the same for HP's LaserJet and DeskJet lines of printers.

Insight Development Corp. also markets a package, called MacPrint, that supports HP's printers. In addition, early this month Insight began shipping a network product, Mosaic for Macintosh, that lets Macs on Novell networks print to either PCL-driven or PostScript printers on the network.

Corporate printing strategies. All in all, corporate printing strategies for the Mac will continue to revolve around networkable PostScript machines. But with ATM or TrueType font scaling and dropping prices, many more buyers will be looking at the possibility of using non-PostScript printers in those spots that PostScript printers just can't reach. □

Product Info

APPLE
Personal LaserWriter LS: $1,299; **StyleWriter:** $599; **ImageWriter II:** $595
20525 Mariani Ave., Cupertino, Calif. 95014
Phone (408) 996-1010

EASTMAN KODAK CO.
Diconix M150 Plus: $549
901 Elmgrove Road., Rochester, N.Y. 14653
Phone (716) 724-5393 or (800) 344-0006;
fax (716) 726-3108

GCC TECHNOLOGIES INC.
BLP Elite: $1,599; **PLP IIS:** $1,499; **PLP II:** $999; **WriteImpact:** $699; **WriteMove:** $399
580 Winter St., Waltham, Mass. 02154
Phone (617) 890-0880 or (800) 422-7777;
fax (617) 890-0822

GDT SOFTWORKS INC.
PrintLink Collection 4.0: $99; **JetLink Express 2.1:** $159
4664 Lougheed Highway, Suite 188, Burnaby, British Columbia, Canada V5C 6B7
Phone (604) 291-9121 or (800) 663-6222;
fax (604) 291-9689

HEWLETT-PACKARD CO.
DeskWriter: $729
19310 Pruneridge Ave., Cupertino, Calif. 95014
Phone (800) 752-0900

INSIGHT DEVELOPMENT CORP.
MacPrint 1.2: $149;
Mosaic for Macintosh 1.0 (three): $395;
Mosaic for Macintosh 1.0 (10): $595
2200 Powell St., Suite 500, Emeryville, Calif. 94608
Phone (415) 652-4115 or (800) 825-4115;
fax (415) 652-9857

SHIVA CORP.
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GORDON STUDER

MacInTouch RIC FORD

Fitting Adobe pieces into System 7 puzzle

ATM does not run with 32-bit addressing, and Illustrator 3.0.1 and TypeAlign 1.0.4 don't support the TrueType fonts of the new system.

BUGS & TIPS

Fitting ATM into System 7. Converting an existing Mac system to System 7 is like solving a jigsaw puzzle, and the Mac products sold by Adobe Systems Inc. demonstrate a variety of typical issues.

Adobe Type Manager, for instance, is not 32-bit clean, so it will not run with 32-bit addressing enabled on Macs that have this capability under System 7 (the IIci, IIfx, IIsi and LC).

Another problem with ATM is that it fails to work if its files are placed in subfolders within the System folder. You must move ATM files directly into the top level of the open System folder. If the System folder is closed when you drag files into it, the Finder will automatically place files into subfolders, and ATM will not be able to find them.

You need some way to access the ATM control panel so the ~ATM file is an exception to the top-level rule; it needs to go in the Control Panels subfolder. A neater alternative is to leave it at the top level of the System folder and create an alias for it in the Control Panels subfolder.

If you are using ATM, you may want to eliminate any TrueType versions of your PostScript outline fonts — typically, Helvetica, Times, Courier and Symbol.

To remove TrueType fonts, double-click on the System file while running Finder 7 and locate the icons that show three A's — these are TrueType fonts. (Bit-mapped fonts show only a single A in the icon and include a point size in their names.) If you have a PostScript outline font and at least one bit-mapped font, you can drag the equivalent TrueType icon out of the System file and throw it into the Trash.

I don't recommend retaining both TrueType and PostScript fonts for the same typeface, since the relationships among bit-mapped, PostScript and TrueType fonts are complicated (and confusing) in this configuration.

Other Adobe pieces. Photoshop 1.0.7 is the easiest Adobe piece to fit into the System 7 puzzle. It is completely compatible with System 7, although it does not yet offer any special System 7 features. A System 7-savvy Version 2.0 is due out later this month (see MacWEEK, June 4).

TypeAlign 1.0.4 and Type-Reunion 1.0.1, like ATM, must reside at the top level of the System folder, not in subfolders.

Adobe Font Downloader 4.0, an application, needs the LaserWriter file at the top level of the System folder, although Font Downloader itself can be anywhere. Apple's installer puts the LaserWriter file into the Extensions subfolder, so it must be moved for Font Downloader.

Adobe TypeAlign, Type-Reunion and Font Downloader are 32-bit clean, according to the company, but Illustrator and Streamline are not.

Neither Adobe Illustrator 3.0.1 nor Adobe TypeAlign 1.0.4 support System 7's TrueType fonts, but TrueType is promised for Illustrator by the end of the year.

Adobe offers customer support via phone and fax at the numbers listed below. The company also maintains a support forum on CompuServe (GO CIS:ADOBE).

LaserWriter 7. There are a few tricks to installing LaserWriter 7.0, the new printer driver that works with both System 6 and System 7.

Apple's Installer application should always be used to update to LaserWriter 7.0; don't just drag files to your System folder. The Installer takes care of important ancillary tasks, such as removing the now-obsolete Laser Prep file and updating PrintMonitor to 7.0. You can update the printer files without updating the whole system to 7.0 simply by choosing Customize in the Installer.

In LaserWriter 7.0, the old trick of pressing Command-K or Command-F at just the right instant to get a PostScript file no longer works. Instead, a new button in the print dialog offers "PostScript file" as an alternative destination to "Printer."

Unfortunately, this option produces a large PostScript file, even for the simplest print job.

REFERENCE

Adobe Systems Inc. is located at 1585 Charleston Road, P.O. Box 7900, Mountain View, Calif. 94039-7900. Phone (415) 961-0911; fax (415) 962-3741. □

MacInTouch welcomes comments at MacWEEK Inc., 10 President's Landing, Medford, Mass. 02155. Phone (617) 393-3052; fax (617) 393-3111.

Electronic mail: CompuServe: 72511.44; America Online, Delphi, GEnie, MCI Mail, PAN: MACWEEKBOS; Connect: RICFORD; Internet: 72511.44@compuserve.com; AppleLink ("Attn: Ric Ford" in subject): MACWEEK.

Join us in the MacWEEK Forum by typing GO ZMC:MACWEEK on CompuServe or Zmac.

The Help Desk

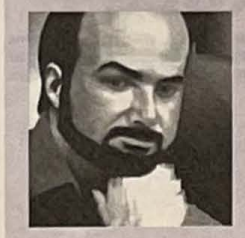
Disinfectant has some spots to clean up under System 7

Disinfectant 2.4 has some problems with System 7. One source of trouble is file sharing. If you are sharing a folder that has applications in it and other users can make changes to the folder's contents, the applications can become infected — even if you are running the Disinfectant extension on your Mac. If you run infected software from the folder, the extension will warn you, but if you copy an application, the virus goes with it.

System 7 hard disks are immune to viruses that infect the Desktop file, but floppies are not. If the Disinfectant application tries to remove a virus from a floppy's Desktop file, it will give an error because the file is in use. The error message will tell you to try again with MultiFinder turned off, which is impossible under System 7. The simplest solution is to rebuild the desktop on the floppy manually by holding down the Option and Command keys while inserting the floppy.

Ask David Ramsey

Opening desk accessories under System 7



Q: *How can I get desk accessories to open in the application heap under System 7?*

A: Under System 6 with MultiFinder, holding down the Option key while choosing a DA would cause the DA to open in the application's memory partition instead of the system heap. This trick was useful with DAs that depended, for example, on the current program's color environment.

DAs installed via the Apple Menu Items folder under System 7 are unaffected by the Option key. But if the DA is in a file opened with Fifth Generation Systems Inc.'s Suitcase II the old trick still works. You also can use Font/DA Mover 4.1 (not included with System 7.0 but available on-line) to install the DA in a specific application.

Q: *I want to install System 7.0, but some programs I need work only under System 6. Can I keep both on my hard disk?*

A: Yes, you can, although it's a little clumsy. If you have a disk that can be partitioned, one solution is to define separate partitions for the two systems and switch partitions to switch systems.

If your disk can't be partitioned or you don't want to reformat it, the solution is a little more complex. You need to keep a separate System folder for each system and select which one you want to use with a little utility called System Switcher (previously known as Blesser), available in the 7-Specific Programs library (LIB 2) of CompuServe's Macintosh System 7 Forum (GO CIS:MACSEVEN).

First, install System 7.0 (To do this without erasing System 6, select your current System folder and choose Duplicate from the File menu before installing.) You now can use System Switcher to select which System folder will be used the next time you boot up. Note that you should always reboot the Mac immediately after using System Switcher, otherwise your Mac can get confused.

When you're running under System 6, you'll see extra folders on your disk called Desktop and Trash. Don't erase these; they're created and maintained by System 7. When you switch back to System 7, you'll likely see it update the disk. This step is necessary to accommodate whatever changes you've made to the disk and file structure under System 6.

Please send questions to David Ramsey on CompuServe: 76702,335 or to Ask David Ramsey, c/o MacWEEK, 301 Howard St., 15th Floor, San Francisco, Calif. 94105.

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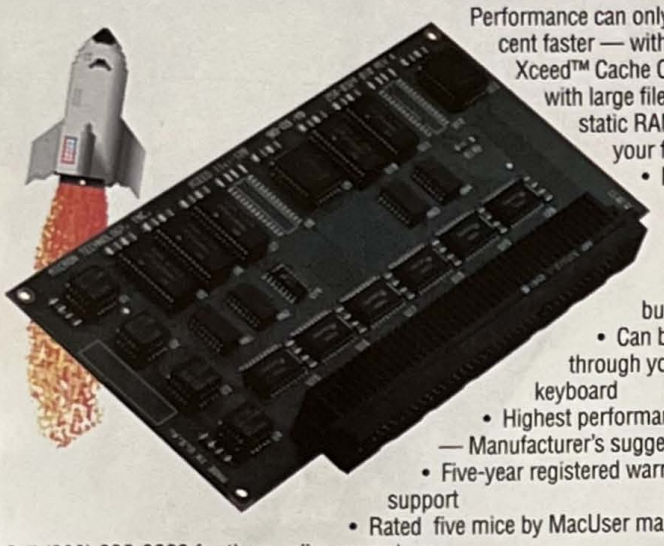

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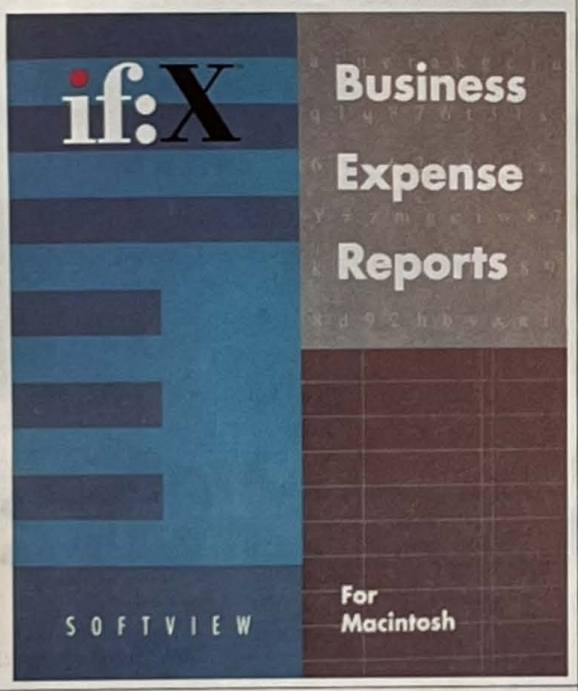

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Printware now offers the Professional-II Laser Imager, newest model in the company's line of PostScript-compatible, high-resolution laser printers. At 1200 dots per inch (that's *true high-resolution* not simulated or "enhanced") the Pro-II offers virtually typeset quality output, with the convenience of plain paper. Type and illustrations reproduce beautifully – including halftones. The system features the state-of-the-art ZipRip Image Processor with 4-Mbytes RAM, 35 resident Printware fonts and a 20-Mbyte internal hard disk for font storage.

For information and samples, call 1-800-456-1616, ext. 115.

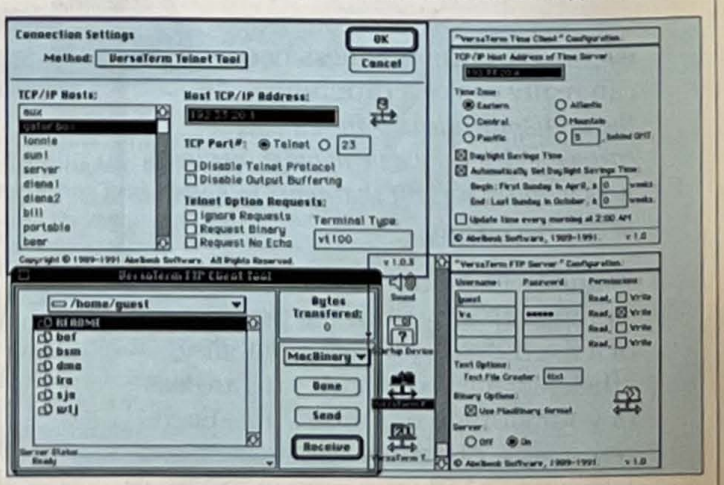
Printware Inc.
1385 Mendota Heights Rd., St. Paul, Minn. 55120 (800) 456-1616, ext. 115

VersaTerm TCP/IP Utilities

VersaTerm 4.5 and VersaTerm-PRO 3.5 provide high quality DEC and Tektronix terminal emulation. Now, a wealth of TCP/IP network services are available, at a price you can't afford to pass by.

TCP/IP Telnet terminal services and FTP (client/server) file transfer services are supported as Communications Toolbox Tools. Additionally, two Control Panel Devices will synchronize your Mac's clock with a TCP/IP host, as well as make your Macintosh an FTP background file server, using less than 50K of memory!

VersaTerm and VersaTerm-PRO have gone Network, but the price is unchanged:
VersaTerm 4.5 at $149
VersaTerm-PRO 3.5 at $295



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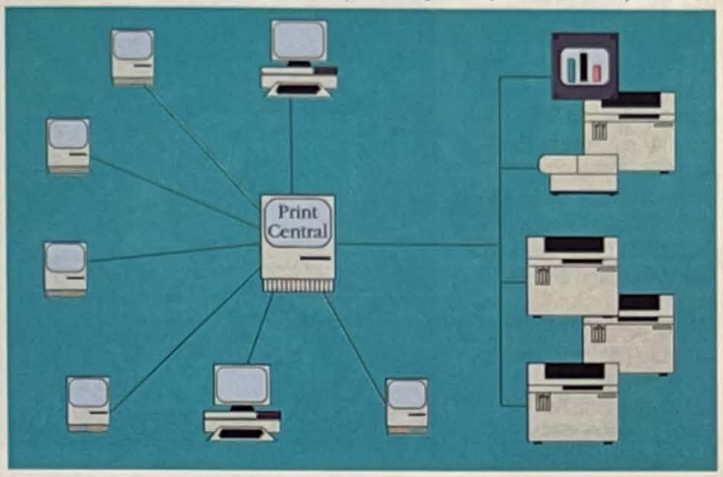

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- One year limited warranty.
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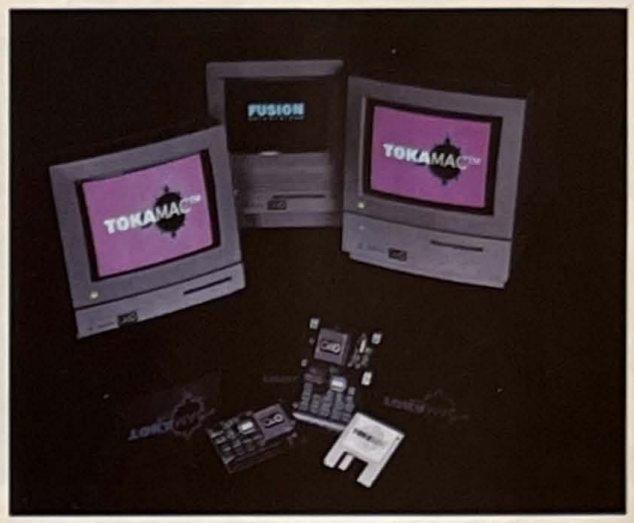
- $2,995.00 suggested retail price.

Dealer inquiries invited.



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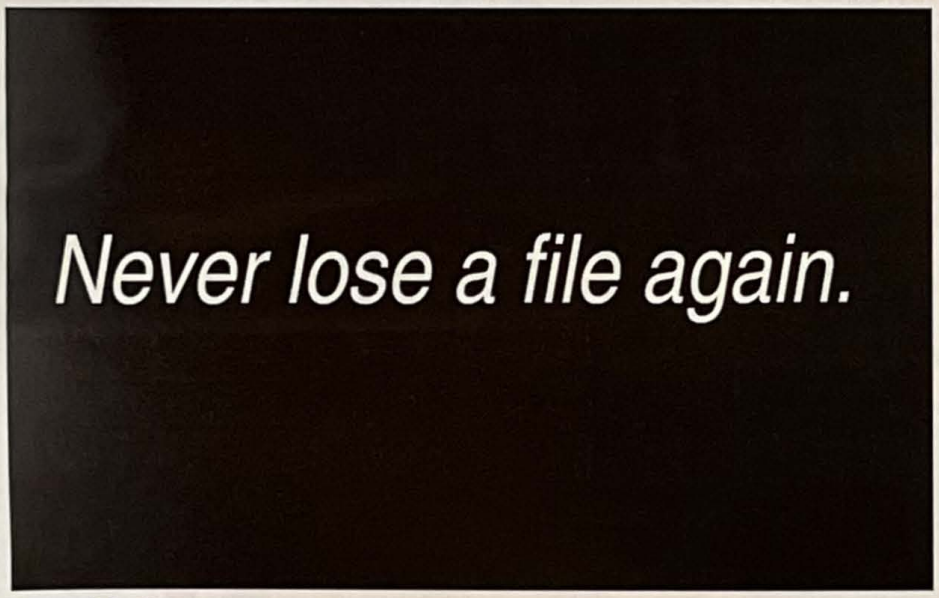

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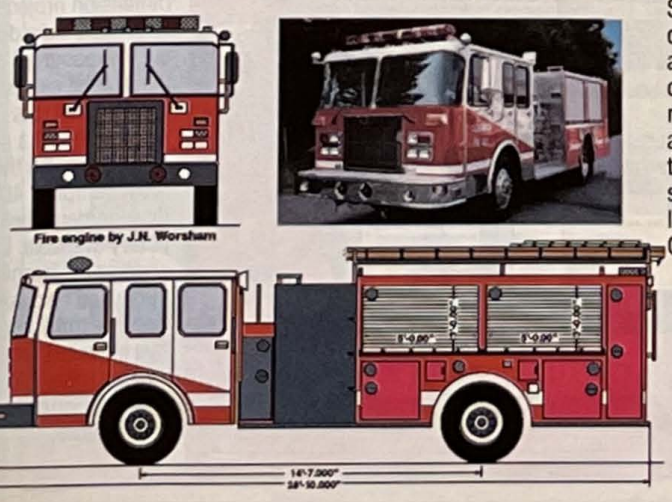

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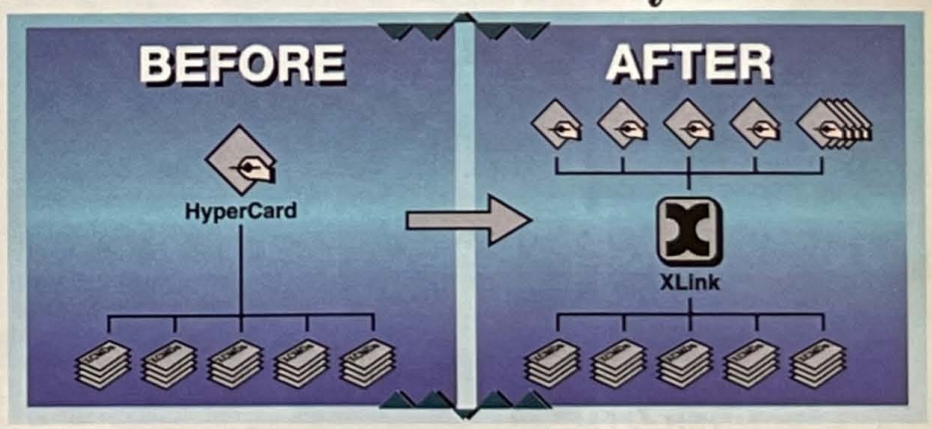

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- Up to 6 WAN ports for Hub configurations.
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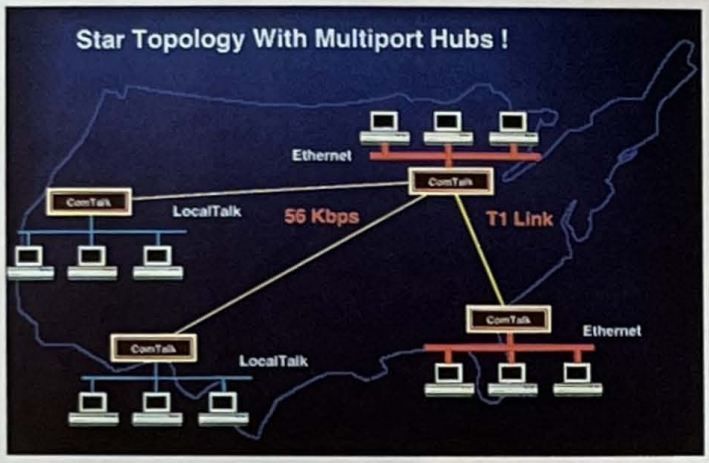
- Network Management from a single Macintosh.

ComTalk is also available in multiport local, and combination remote/local router models.



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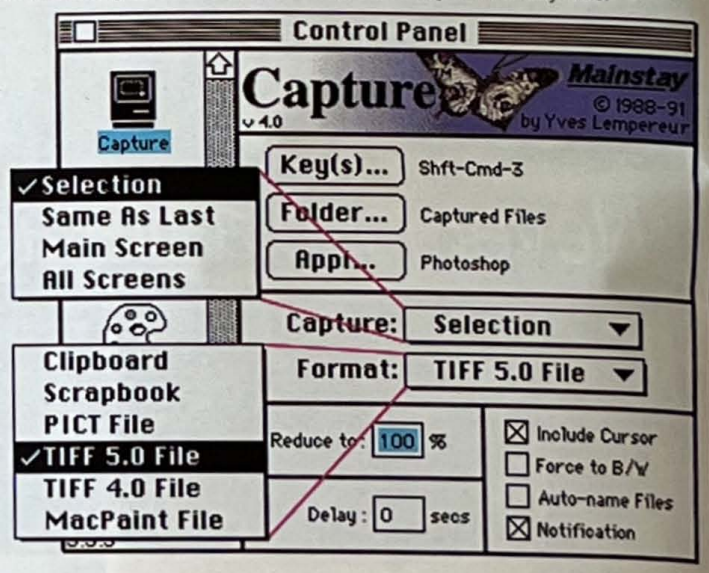

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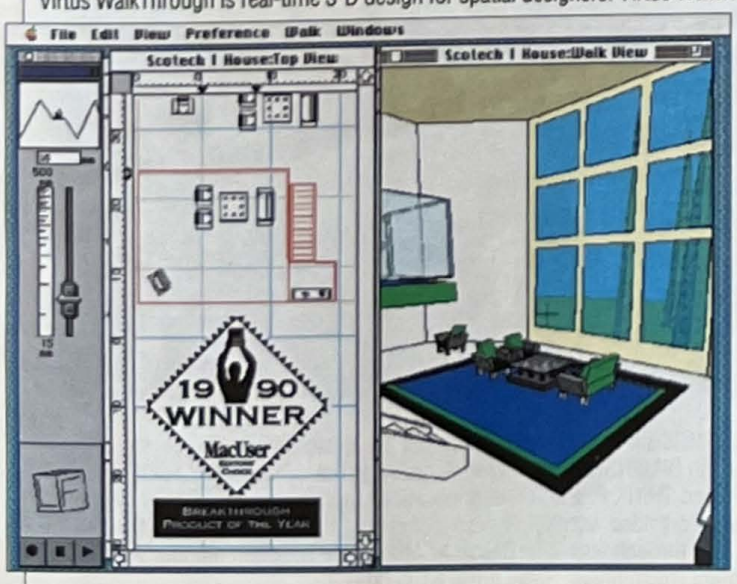

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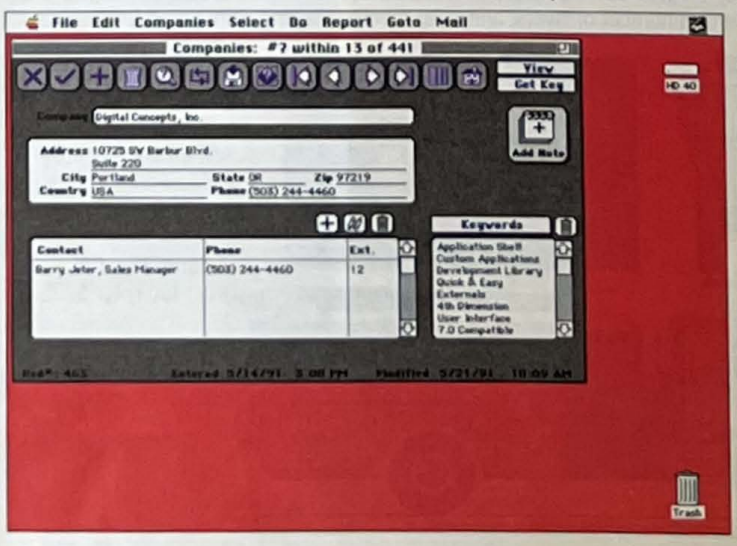

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	LPS	105mb	9ms	$409	$459
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Pro Drives are 3.5" half height drives. LPS Drives are 3.5" third height drives.
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Ask about 5 year warranty!

Seagate drives have a **ONE Year Warranty.** Most drives are 5 1/4" Full Height drives. Internal drives fit Mac II, IIx, IIfx.
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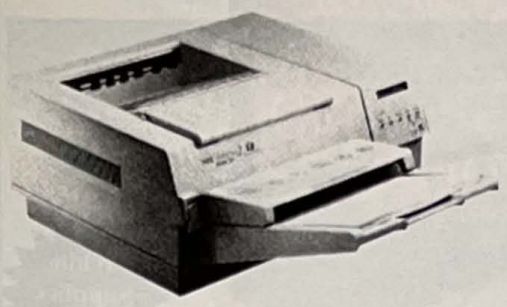

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- 6 ppm
- 16 MHz
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- 17 Fonts
- 1.5 MB RAM
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- 35 Fonts
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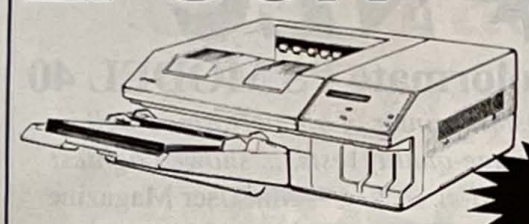

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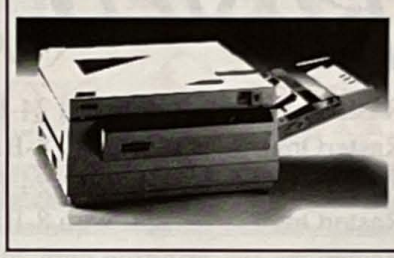

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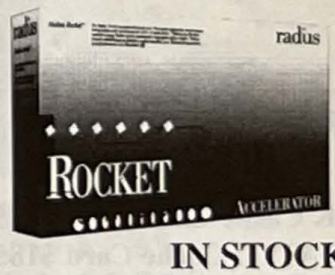

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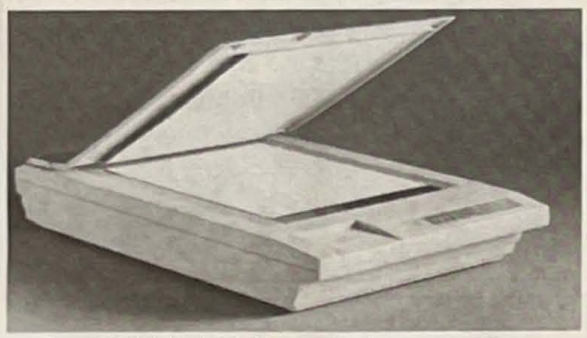

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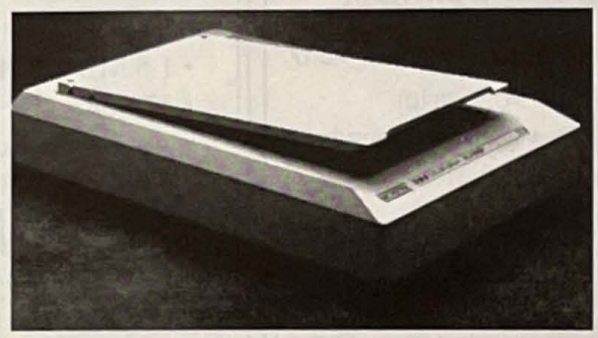

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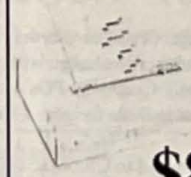

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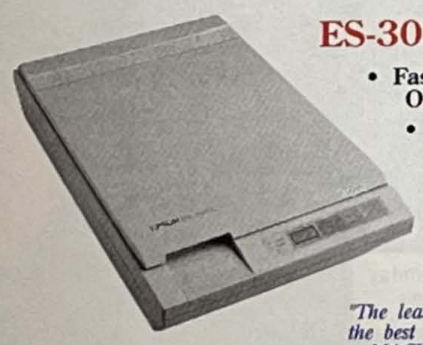

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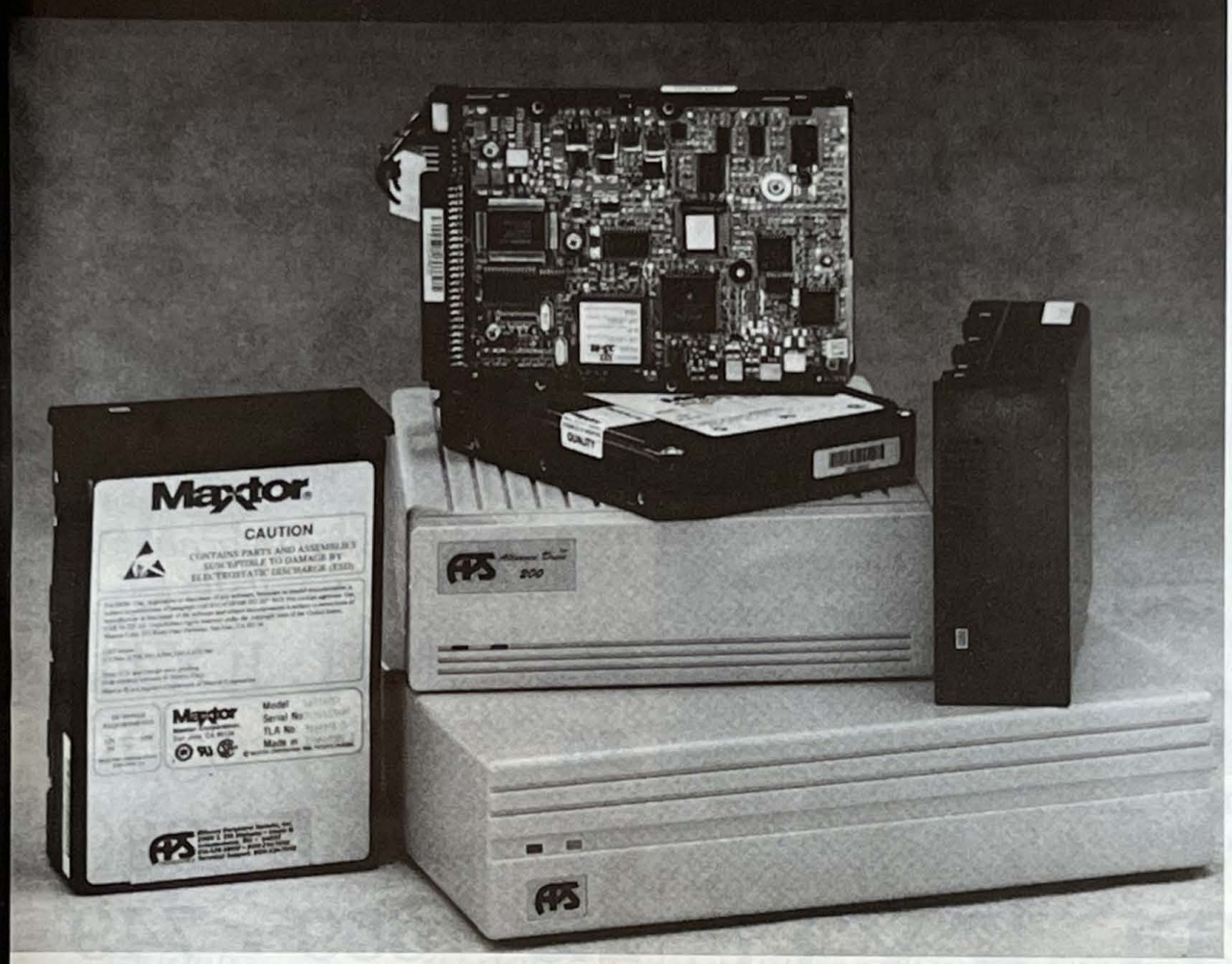

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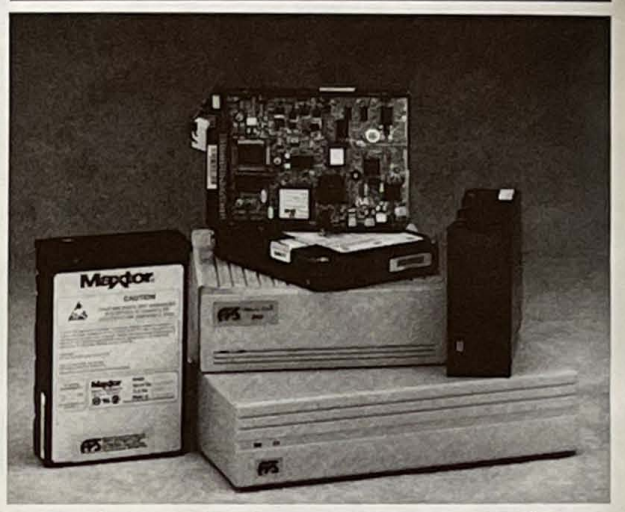

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600MB

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MB	INTL	EXTL
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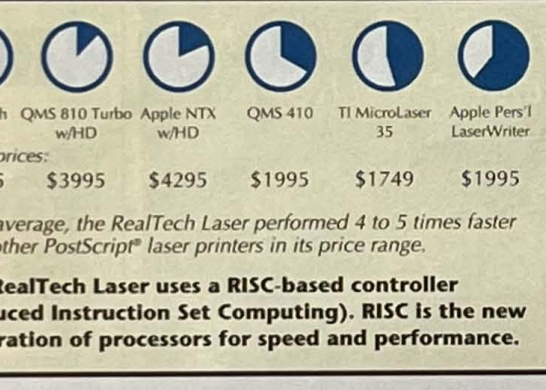

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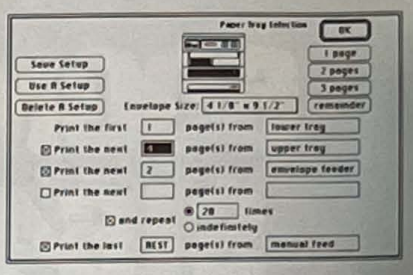
Paper Tray Selection
OK
Save Setup
Use A Setup
Delete A Setup
Envelope Size: 4 1/8" x 9 1/2"
1 page
2 pages
5 pages
remainder
Print the first 1 page(s) from lower tray
Print the next 4 page(s) from upper tray
Print the next 2 page(s) from envelope feeder
Print the next page(s) from
and repeat 20 times
indefinitely
Print the last REST page(s) from manual feed

Tired of hopping up and down to change the paper in your printer?

Now you can stay seated while you specify up to 4 paper changes!

Save your energy for thinking instead of switching paper in your printer trays. Print a two-page letter with letterhead from tray one and plain paper from the manual feeder – all without getting up from your chair. Add our optional second tray and envelope feeder, and you can specify up to 4 paper changes without moving anything but your mouse.

$ TRADE-INS ACCEPTED

YES, we take trade-ins on all Apple LaserWriters:

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Trade-in value depends on the number of pages on the engine and on any problems found with the unit. Unit must be able to run a self-test. Call for more information.

DAYSTAR ACCELERATORS

Mac II, Mac IIX, Mac IIcx	
25 Mhz	1065
40 Mhz	1355
50 Mhz	1845
Mac IIci	
40 Mhz	925
40 w/68882	1135
50 Mhz	1635
50 w/68882	1915
Fast Cache IIci	269
RAM Powercard	709
SCSI Powercard	1060
1 Megabyte SIMMS	Call
4 Megabyte SIMMS	Call
Classic Memory	Call

Ask about our no-hassle upgrade program for the Mac IIcx.

We can schedule a swap-out of your mother board with the Daystar accelerator that's already installed.

Double or triple your speed with no down time. Now that's service you won't find anywhere else!

$4169 Mac IIsi 14" Trinitron System, 5 Mb RAM, 105 Mb Quantum, Datadesk Switchboard

$5499 Mac IIci B&W 21" Dual Page System, 4 Mb RAM, 105 Mb Quantum, Mac 101 Keyboard

$5139 Mac IIci 14" Trinitron System, 4 Mb RAM, 105 Mb Quantum, Mac 101 Keyboard

$11,159 Mac IIfx 2 w/ 1 Floppy Drive, 8Mb RAM, 325 Mb Internal Hard Drive, Ikegami 24-bit 19" Color Monitor and Video Card, Datadesk, Mac 101 Keyboard

SYSTEMS

Classic, 4 Mb RAM, 40 Mb Hard Drive	1495
Classic, 2.5 Mb RAM, 40 Mb Hard Drive	1395
Classic, 4 Mb RAM, 105 Mb Hard Drive	1695
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Mac IIsi 14" Trinitron, 3 Mb RAM, 40 Mb Hard Drive, Mac 101 Keyboard	3749
Mac IIsi B&W Full-Page System, 5 Mb RAM, 40 Mb Hard Drive, Mac 101 Keyboard	3749
Mac IIsi B&W 21" Dual-Page System, 5 Mb RAM, 105 Mb Quantum, Mac 101 Keyboard	4595
Mac IIsi 14" Trinitron, 9 Mb RAM, 105 Mb Hard Drive, Mac 101 Keyboard	4589
Mac IIsi B&W 21" Dual-Page System, 9 Mb RAM, 105 Mb Hard Drive, Mac 101 Keyboard	5039
Mac SE/30 System, 5 Mb RAM, 105 Mb Quantum, Mac 101 Keyboard	3179
Mac SE/30 14" Trinitron 24-bit Color, 5 Mb RAM, 105 Mb Quantum, Mac 101 Keyboard	4429
Mac IIci GS 21" Dual-Page System, 5 Mb RAM, 105 Mb Quantum, Mac 101 Keyboard	5999
Mac IIci 19" Trinitron 8-bit Color, 5 Mb RAM, 170 Mb Hard Drive, Mac 101 Keyboard	7450
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No more squinting and scrolling! Seeing two pages at once will save you hours of time.

The latest in flicker-free monochrome technology provides true WYSIWYG! 21" landscape display with 1152 x 870 resolution, 74 dpi. Vertical refresh rate of 75 Hz, full gray scale capability, and flat CRT (P4 phosphorus, polished screen). One year warranty.

CPU	Monitor	Price
Mac SE	Mono	$995
Mac II, IIcx, IIci	Mono	$995
IIx, IIfx, SE30	GS 256	$1479
Mac IIsi	Mono	$1059
Mac Portable	Mono	$1249

$619

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43% brighter than the leading competitor!

High-resolution Trinitron tube makes it possible to view 16 million shades of color! 640 x 480 resolution, 72 dpi. 14" display has integrated tilt & swivel base.

RasterOps

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ColorBoard 24STV	1269
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Includes Adobe Photoshop—full version, with 24-bit color editing and color separation capabilities

Scanmaker 600ZS Color Scanner (600 dpi). Outstanding image quality in a compact, flatbed design. High resolution scanning in 150 seconds (letter size)

- 16.8 million colors
- 3 scanning passes (red, green & blue filters)
- 14 brightness settings for each color plane
- optional sheet feeder

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- 15" portrait display
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- Full gray scale capability
- Flat CRT, P4 phosphorus, polished screen
- One-year warranty

CPU	Monitor	Price
Mac II, IIcx, IIci, IIx, IIfx, SE, SE30	Mono	$579
Mac II, IIcx, IIci IIx, IIfx	GS 256	$1079
Mac IIsi, IIci	GS 16	$495
Mac Portable	Mono	$849

$2569

Ikegami 19" Trinitron Color Systems!

The right solution for every budget!

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System	Colors	Price
Entry Level	256	**$2569**
Professional	256	**$2895**
Master's	16 million	**$3495**

SCANNERS

The Typist	499
Microtek Scanmaker 600GS (256GS)	1119
Microtek Scanmaker 600ZS (inc. Photoshop)	1469
Microtek Transparency Conv.	1895
XRS Transparency Scanner	3950

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Standard 12 x 17	1199
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Standard 15 x 15	1199
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MacCon+ IIE64	289
MacCon+ SEE	255
MacCon+ IIET	255

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EtherPrint-T	340
DaynaPORT E/30	275

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Star Controller EN	1709

SHIVA

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Etherport II Board	375
Etherport SE Board	375
Fastpath 4	2079
Netbridge	445
NetModem 9600 v.32	1249
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GraceLan	Call
DataClub	Call
Carbon Copy Mac, 2 User	189

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210PRO 10ms	$679	$759

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DI 6.18.91

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VisionPRO Monitor System

When purchasing Systems, compare the options and features. VisionPRO Color Graphic cards are manufactured under license for MacTel Technology and support Macintosh graphical needs now and in the future.

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- **8-Bit 20" SystemPRO**
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  - **75 Hz** ..... $ 3249

- **8-Bit 19 " SystemPRO SONY**
  VisionPRO* VideoCard, 19" SonyTrinitron (GDM- 1950) - **75 Hz** $ 3625
- **24-Bit VisionPRO Interface Upgrade Kit**
  w/ purchase of any system PRO..... $ 600

All VisionPRO Interface cards have multi-monitor support (Sony 19"& Ikegami 20"), support BlockMode transfer & acceleration, Upgradeable 8-Bit to 24-Bit cards, Pan/Zoom 2X & 4X and virtual desktop. Business system video card offers Pan/Zoom 2X & 4X and virtual desktop.

Monitors

Apple 13" RGB	$ 749
Hitachi 14" MVX Super Hi-Res Monitor w/Tilt & Swivel	$ 575

Upgrade Kits

Vision ST Upgrade Kit (8 - 24 Bit)	$ 135
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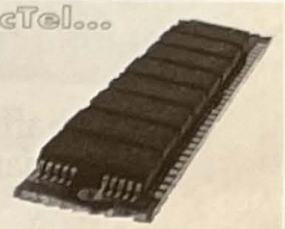
Video Interface/cards

• 8-Bit Vision ST 813 for 13" or 14" Monitor	$ 275
• 24-Bit Vision ST 2413 for 13" or 14" Monitor	$ 375

Index Memory Modules

Five reasons to buy MacTel...



1. Our Memory Modules are **manufactured in-house** at our state-of-the art facilities.
2. **100 %** tested to ensure that you recieve only the highest quality products.
3. We are so confident of our memory that we offer a **lifetime warranty**.
4. Field failure rate of **less than 1%.**
5. **Gold traces and contacts** used to ensure durability and longevity.

So, next time you are in the market for memory, look no further. Turn to MacTel where you are assured of **quality, reliability and extremely competitive pricing** day in and day out.

• Call for Current Prices •

- **1Mb** Surface Mounted /lowProfile 70/80ns lifetime warranty ..... $ 42.95
- **1 Mb** FX and laserwriter II SIMM 70/80 ns ..... $ 43.95
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- **3 Mb** CLASSIC Memory ..... $ 139
- **4 Mb** SIMM' s (all Mac's) Surface Mounted / -80 ns - bundled with Maxima (min. 4 units for **Maxima** software) ..... $ 179

NEW

- **1 Mb TI Microlaser PS 17&35 memory upgrade** (Increase printing speed and download more fonts) ..... $ 79
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MacTel Extended Keyboards

• 105 keys layout • T-style cursor pad • 15 built in function keys • ADB compatible • Enlarged Return Key • 6 cursor control keys • High-Reliability • Click Tactile Mecanical Keyswitch •

NEW

- English ..... $ 99
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French, German, and Swiss Keyboards delivered with system software !

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Imprimis Drives Index 5.25"

All INDEX drives include MacTel HD Utilities and 14 Mb PD.

2 YEAR WARRANTY !

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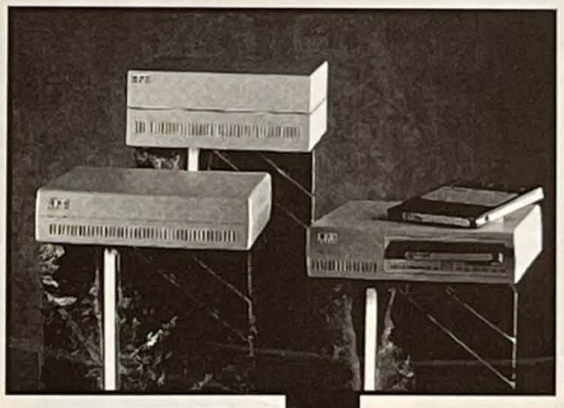
170 Mb	12 ms	$ 699		$ 779
210 Mb	12 ms	$ 769		$ 849
425 Mb	12 ms	$ 1499		$ 1579



1 YEAR WARRANTY !

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*Fits only MacII,MacIIx & MacIIfx. All **INDEX** external Harddrives are supplied with universal power supplies, for world-wide adaptability.

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- **MacTel 45R** W/ 1 cartridge ..... $ 499
  Syquest Cartridge SQ 400 ..... $ 69
- **2 GB DAT Drive** w/Retrospect & 1 tape ..... $ 1799

MacTel 45R was rated 4 mice by **MacUser** and comes with Backmatic and autosave....!

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MacTel offers you the best low cost postscript printers in the market today: The Texas Instruments Microlaser. As further proof of our commitment to the product, we designed and built the 1 Mb upgrade for these printers.

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- MacTel Nets ..... $ 15
- **1Mb UPGRADE SALE $ 79**

*price include Apple Talk Connector

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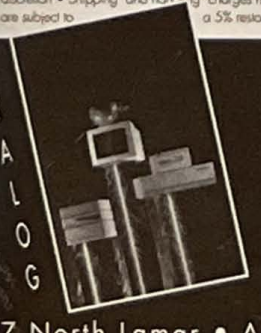

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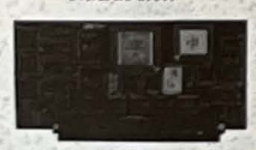


DayStar Digital

40MHz-$1110

50MHz-$1895

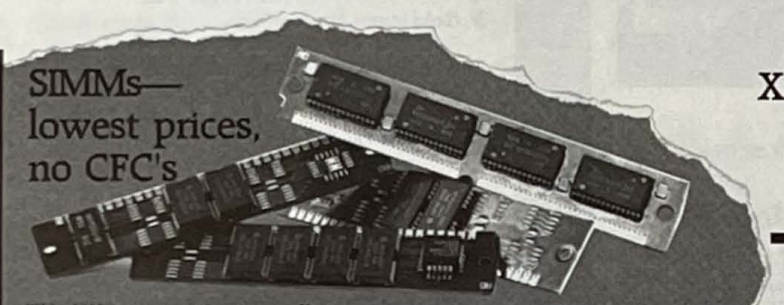
Don't be fooled by low prices. Our price includes the necessary 882 math coprocessor; others may not.

Digital Vision $329

24-bit frame grabber. Great for still video.

64K Cache Card $159

Improve your Mac IIci NuBus performance.



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LC VRAM $85 LC 16 MHz FPU $119

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Available in four configurations:

Board only (0 mb)	$45	(0 mb) w/40mb Maxtor	315
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*Remove SIMMs & drive from IIsi, install in Classic.

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45R SyQuest, one cart	$475
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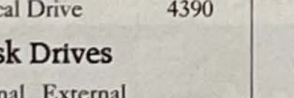
52L*	(Quantum)	280	370
80L*	(Maxtor)	380	470
105L*	(Quantum)	440	530
120	(Quantum)	640	730
170	(Quantum)	690	780
210	(Quantum)	750	840

**Low power internal drives for Classic, IIsi & LC—meet Apple power specs.*

Seagate MacWren Drives

	Internal	External
300	$1250	$1400
330 Runner	1450	1600
330*	1290	1410
425	1550	1670
415*	1790	1910
600	1590	1740
650	1740	1890
1000	2550	2700
1350	3490	3640

**Highest capacity internal drives for Mac cx, ci, SE and SE30. These also work in the II and IIfx.*



Mindsurfing for the Mac

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Macworld finds our drives quietest.

"The quietest of the 64 drives tested...fast—three of the twelve fastest tested were Third Wave's"...and finally, "a good bargain."
-Macworld, *March 1991*

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105/45R	$1020
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OptiDisk™ 600 —the least expensive way to store your data. Over 30 combination drives available. Call for more information.

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45R using Syquest cartridges, available as single, combo or dual removables.

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Direct Color/GX NTSC	590
Radius Color Pivot	1490
Color Pivot Interface	590
Radius 19" 24 bit Color System	4750
Radius Accelerators	Call
RasterOps	
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24S-24Si-264 SE30	559/769/649
8L-24L Systems	Call

SuperMac Video Systems	Call
Seiko Trinitron 14"	589
Seiko ColorPoint Printers	Call
Ikegami Trinitron 19"	2100
64K IIci Cache Card	**159**
DayStar Powercards	Call
TI MicroLaser PS35	1695
Microtek 600ZS Color	1599
Nikon LS3500 Slide Scanner	9365
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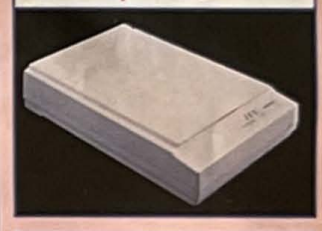

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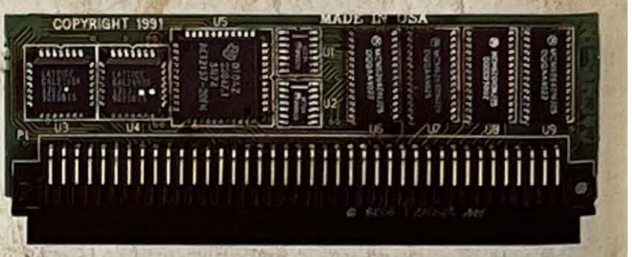
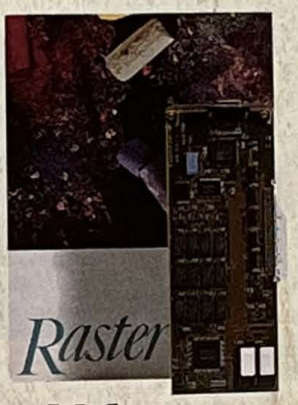
#00144 Clipper 20MB Hard Drive $359
#00170 WIP 50MB Hard Drive $399
#00802 SyQuest 45MB Removable Hard Drive $589

DayStar FastCache IIci
$278



DayStar's 64k FastCache IIci for the budget minded is the leader in standard cache cards. The powerful Fast Cache IIci completes the Mac IIci design by allowing it to operate at maximum speed. The Mac IIci's processor can't run at its most efficient level without a cache card. The FastCache IIci plugs directly into the IIci's Cache Connector and boosts processing speed from 30% to 70%! Installation is as easy as plugging in a NuBus card and can be done in minutes at home or the office. Proven reliability and performance for over a year.
#02877 FastCache IIci



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#00005 RasterOps 24STV

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The UnMouse does everything a mouse can, only faster, easier and in less space. To move the cursor simply slide your finger over the glass surface. To make a selection, merely press down. The UnMouse also serves as an extended keyboard. Tap the large red button and you instantly have a Power Keypad with 16 keys available to execute macros (60 in advanced mode). With its one million touch points the UnMouse also performs admirably as a graphics tablet.
#03412 UnMouse: $180

Microtek Lab's ScanMaker 600ZS
$1935

The newest addition to Microtek's award-winning series of color/grayscale scanners. Capable of scanning 24-bit color, 256 shades of gray and B&W, it captures images with up to 600 dpi resolution. Included is a full version of Adobe Photoshop, sophisticated image editing and retouching program designed for artists and desktop publishers.
#00369 ScanMaker 600ZS

DoveFax Plus
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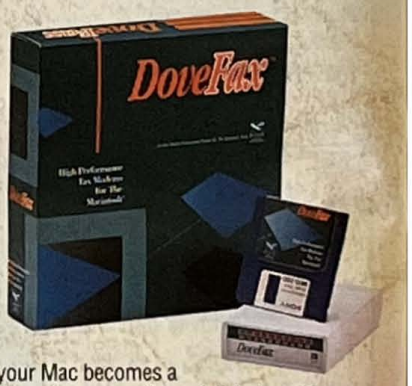

With the DoveFax Plus, your Mac becomes a personal voice messaging system, as well as a full-featured fax machine. It offers the most sought-after fax software features including: full background operation when sending or receiving a fax; automatic answer, so you can receive a fax without interruption; redialing to guarantee fast delivery; prescheduled transmissions to send multiple faxes after hours; customized cover sheets and more!
#00294 DoveFax Plus

SyQuest Removable Cartridge
$74

#02183 Removable Cartridge

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00812 Monitor Stand for IIcs & IIci	47	03755 SE/Plus Std. Keyboard	17
00127 Utility Pac	15	00107 HP Deskjet/Deskwriter	11
Dust Covers		00108 HP Laserprinter Series II/III	15
00102 IIsi 13" Mon Ext. KB	17	00103 Imagewriter II	11
00104 LC 12" Mon w/LC KB	17	00105 Imagewriter LQ	15
00044 Mac Classic w/LC KB	16	00106 Laserwriter II SC/NT/NTX	17
00100 Mac II/x/fx 13" Mon Ext. KB	17	***Hardtop Covers***	
00089 Mac IICX/CI 13" Mon Ext. KB	17	00110 Mac LC KB	15
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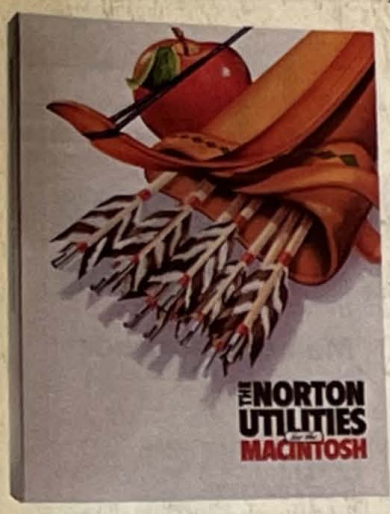

Norton Utilities $83

Symantec's Norton Utilities for the Mac gives you an unbeatable combination of disk and data recovery software, along with disk optimization utilities. Now you can keep your valuable disks and data safe, secure and operating smoothly. It provides three levels of unerase to give you optimal recovery options. Advanced diagnostic routines dig deep into the Mac operating system tool box to search for and recover lost data in minutes.
#03279 Norton Utilities

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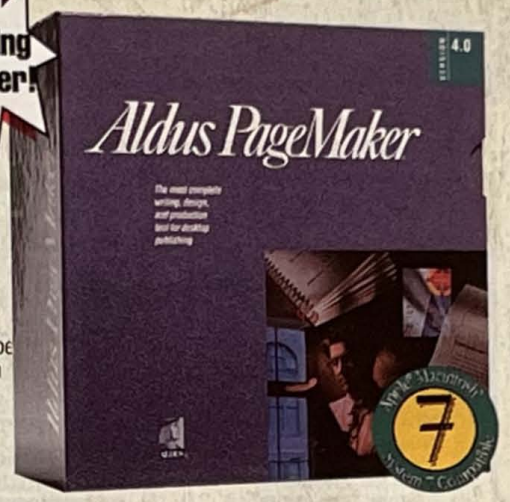

Aldus PageMaker 4.0 $498

PageMaker 4.0 has new features that include a blindingly fast Story Editor, extended support for color, the ability to rotate text, a built-in dictionary and spe checker. Files can be up to 9999 pages and multiple files can share a common index. "Hot Links" can be made so that updates in attached files are automatically imported into PageMaker. **All Mac Zone ads are created on Macs with PageMaker 4.0.**
#03223 PageMaker 4.0

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#0372 WordPerfect

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#03814 $18

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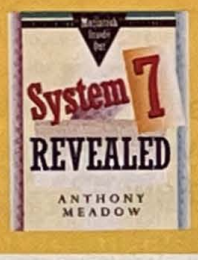
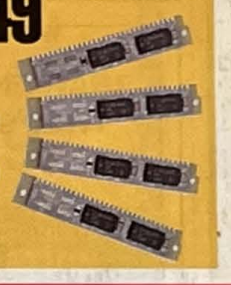


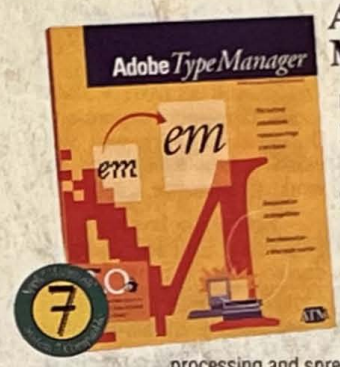
SIMMs $49

#034281 MB



#008011 MB
$47
#035834x4 MB '030
$1069
#035844x4 MB '020
$1069
#035854x4 MB FX
$999

Adobe Type Manager



$54

With Adobe Type Manager you get printed pages that rival laser quality, and a screen image that is just as sharp. It is compatible with virtually every Macintosh software application—word processing and spreadsheets to page layout and presenations. Of course, your Adobe PostScript printer will work as it always has. **#03497 Type Manager**

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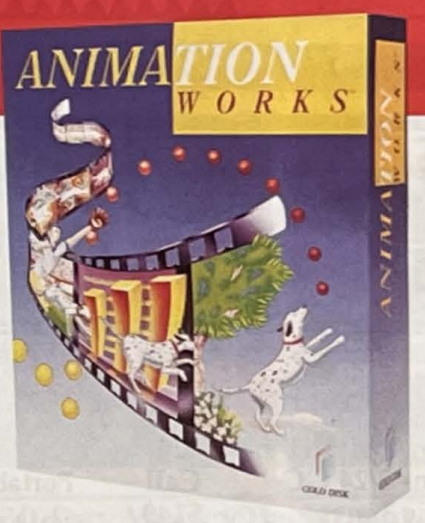
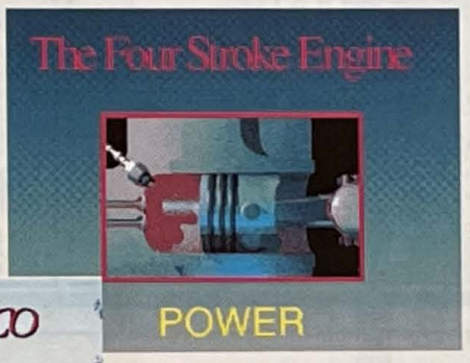
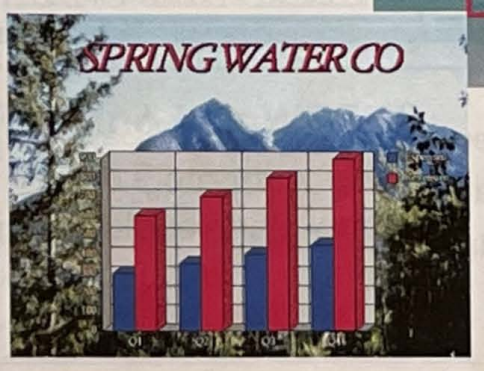
***Animation Works* makes you look good.** A full set of XCMDS allows you to use your movies in HyperCard stacks for unlimited possibilities. A freely distributable runtime module means your presentations can go where you can't. The storyboard feature will automatically print illustrated leave-behinds, so you not only make a better impression with *Animation Works*, you make a lasting one.







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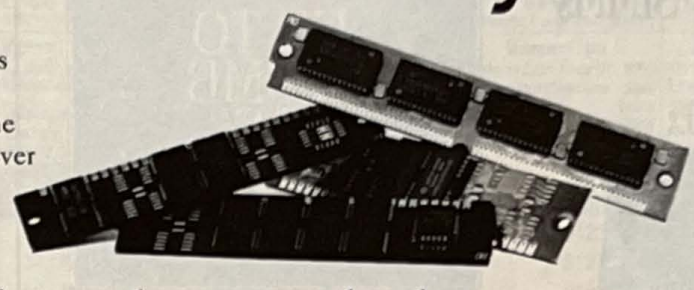

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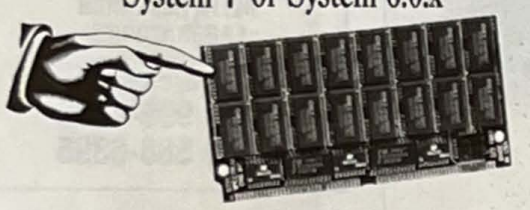

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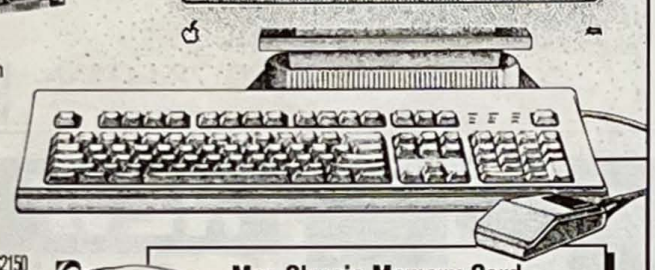

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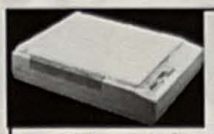

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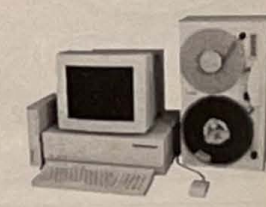

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☐ 01. Yes ☐ 02. No

1 Your company's primary business activity at this location:

(Select one only.) Write Answer Here ➨ ☐

Non-Computer Related
01. Aerospace
02. Architecture, Engineering
03. Research and Development
04. Graphic Arts
05. Communications: Publishing, Advertising, Public Relations, Promotion
06. Government
08. Manufacturing
09. Education
10. Finance: Banking, Accounting, Insurance, Real Estate
11. Health, Medical, Legal
12. Non-Computer Retailer, Wholesaler, Distributor
13. Agriculture, Mining, Construction, Oil, Transportation, Utilities

Computer Related
20. VAR/VAD
21. Retailer/Distributor
22. Systems House/Data Processing Service
23. Manufacturer (Computers, Software, Peripherals)
24. Computer Consultant
99. Other Businesses & Services (please specify) _____

2 Your Professional Title:

(Select one only.) Write Answer Here ➨ ☐

A. Chairman/President/Owner/Partner
B. VP/Controller/Treasurer
C. General Manager/Director
D. Micro Manager/Specialist/Coordinator
E. Project Manager
F. Art Director/Graphic Designer/ /Artist/Illustrator
G. Manager/Supervisor (not listed above)
H. Architect/Engineer
I. Systems Analyst/Programmer
J. Consultant/Advisor
K. Scientist
L. Educator
M. Editor/Writer
N. Professional (Doctor,Lawyer, etc.)
O. Accountant
P. Representative
Z. Other (please specify) _____

3 Your department/function at this location:

(Select one only.) Write Answer Here ➨ ☐

A. Engineering/Systems Engineering
B. Research & Development
C. Communications/Publishing/Public Relations
D. Art/Creative Design
E. MIS/DP/Information Systems
F. Manufacturing/Operations/Production
G. Sales/Marketing
H. Administration/Management/Personnel
I. Accounting/Finance
J. Education/Training
K. Science
L. Consulting
Z. Other (please specify) _____

4 Are there Macintoshes or other PCs listed below owned and/or planned for purchase within 1 year at this location?

☐ Yes ☐ No

			Currently Owned (Quantity)	Plan to Buy (0-12 Months) (Quantity)
MODULAR	68030 Macintosh IIfx / IIci / IIcx / IIx	3		
	68030 Macintosh IIsi	4		
	68020 Macintosh II / LC	5		
	68000 Macintosh Portable	6		
COMPACT				
	68030 Macintosh SE/30	7		
	68000 Macintosh Classic	8		
	68000 Macintosh SE / Plus / 512	9		
OTHER				
	IBM/Compatible Micro	10		
	Workstation (e.g. Apollo, Sun)	11		

Please remember to sign and date the form.
All questions must be answered completely, and be sure to provide specific numbers where requested.
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5 If your firm's primary business at this location is retailing, reselling or consulting, how many Macintoshes are sold per year?

(Answer one only.)

A. Retailer: sold per year _____(specify quantity)
B. Reseller: resold per year _____(specify quantity)
C. Consultant: purchased by your clients through your firm's recommendations per year _____(specify quantity)
☐ D. Not Applicable

6 Please check the Mainframe(s) or Minicomputer(s) at your location:

(Check all that apply.)

☐ 01. VAX ☐ 02. IBM Mainframe ☐ 03. IBM Minicomputer ☐ 04. Other ☐ 09. None

7 Do you purchase, recommend, specify or approve any of the Macintosh/Compatible products listed below?

☐ Yes (If yes, check all that apply): ☐ No

Computers
☐ 01. Macintoshes
☐ 02. Workstations
☐ 03. Minis, Mainframes

Connectivity
☐ 10. Local Area Networks
☐ 11. Modems
☐ 12. Micro/Mini/Mainframe Links
☐ 13. Communication Software

Peripheral Equipment
☐ 20. Laser Printers
☐ 21. Color Printers
☐ 22. Color Monitors
☐ 23. Hard Disks
☐ 24. Backup Systems
☐ 26. Scanners
☐ 27. Input Devices
☐ 28. Removable Storage

Add-in Boards
☐ 40. Memory Boards
☐ 41. Graphic Boards
☐ 43. Ethernet Boards
☐ 44. Video Boards

Software
☐ 50. CAD/CAM
☐ 51. Graphics
☐ 52. Desktop Publishing/Fonts
☐ 53. Desktop Presentation
☐ 54. Database
☐ 55. Programming
☐ 56. Accounting, Payroll
☐ 57. Spreadsheets
☐ 59. Project Management
☐ 60. Word Processing
☐ 61. Utilities
☐ 62. Multimedia

8 If you answered yes to the above computer products, for how many Macintoshes do you have this involvement?

(Select one only.) Write Answer Here ➨ ☐

01. 1000+
02. 500-999
03. 100-499
04. 50-99
05. 20-49
06. 10-19
07. 1-9
09. None

9 Please indicate the communications capabilities that the Macintoshes at your location have:

(Check all that apply.)

☐ 01. Local Area Network
☐ 02. Communicate with corporate workstations, mini or mainframe computers
☐ 03. Communicate with remote mini or mainframe computers
☐ 04. Communicate via modem
☐ 05. Voice/Data
☐ 09. Other (please specify)

10 Indicate how many employees there are in your entire company:

(Select one only.) Write Answer Here ➨ ☐

01. 1000 or more 02. 100-999 03. Under 100

11 Indicate an additional individual at this location who might qualify for a FREE subscription to MacWEEK:

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Title _____ Dept. _____

• Your Signature _____

Title _____ Date ___/___/___

PLEASE BE SURE THAT ALL QUESTIONS ARE ANSWERED.

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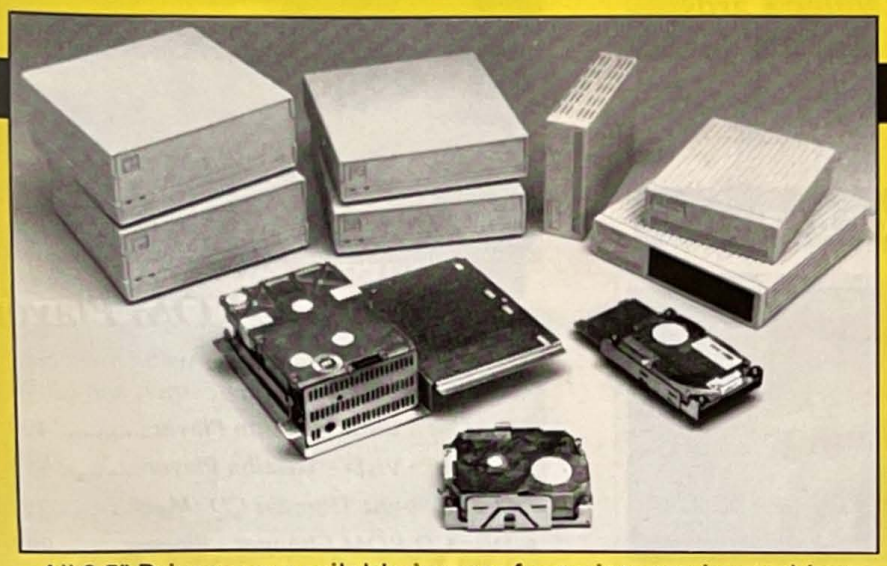


- All 3.5" Drives are available in zero footprint or micro cabinets as well as internal for tall Mac's
- All 5.25" Drives are available in zero footprint external or as internals for the Mac II, IIx, and IIfx

Fujitsu 3.5" Drives

3 Year Warranty. *50,000 Hours MTBF

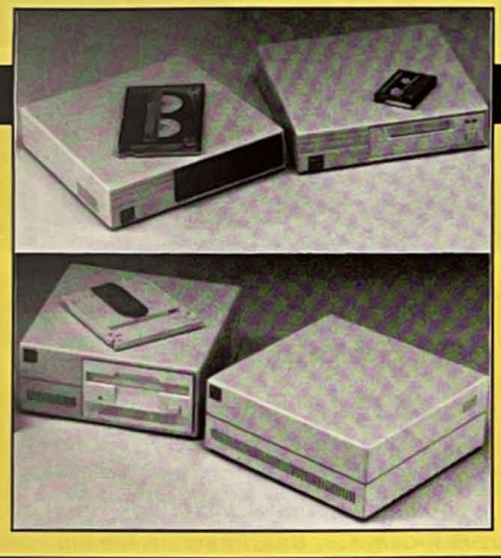
		Internal	External
45 MB	3.5"	$238	$298
90 MB	3.5"	$338	$398
135 MB	3.5"	$418	$498
185 MB	3.5"	$598	$678

Fujitsu 5.25" Drives

5 Year Warranty! *200,000 Hours MTBF!

		Internal	External
357 MB	5.25" Full Hght 16ms	$1298	$1448
680 MB	5.25" Full Hght 16ms	$1698	$1798
1.2 Gig	5.25" Full Hght 14ms	$2598	$2698

*Mean Time Between Failure is the average life expectancy of a drive.
24 hour factory replacement available for 5.25" drives for additional fee.



Siemens 525 MB Tape Backup

525 MB Tape $998

- Use two tapes for 1gigabyte
- Fast networkand unattended backup capabilities

Wang Dat Tape Backup

1.2 Gig DAT $1698

- Fast network and unattended backup capabilities

Ricoh Optical

600 MB Optical $2695

- Read/write reliable storage

1.2 Gig Fujitsu

	Internal	External
1.2 Gig H/D	$2598	$2698

- 14.5 M.S. access time / 4.8 mbs transfer rate
- 200,000 hours mean time between failure
- 5 year warranty
- Incredibly fast!

WREN! DRIVES

	Internal	External
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300H/H	$1294	$1394
337 MB RUNNER	$1398	$1498
404MB H/H	$1578	$1678
600MB F/H	$1624	$1724
1.2 GIG	$2398	$2498

Quantum Drives

	Internal	External
40MB 3.5"	$258	$339
52MB 3.5" LPS	$278	$348
80MB 3.5"	$409	$479
105MB 3.5"	$358	$458
105MB 3.5"LPS	$448	$498
120MB 3.5"	$598	$658
170MB 3.5"	$688	$758
210MB 3.5"	$778	$848

800K Mac Floppy Drive

The Fujitsu External floppy drives have a one year warranty. These are the same drives that retail for $259!

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With Cartridge $458.00
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All Packages include Monitor, Cable, and Video Board!

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Includes 19" Trinitron, Relax 24-Bit Video Board, & Cable!

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Trinitron System offers 1024 x 768 resolution while displaying over16 million colors at 75 hz.

8-Bit - 256 Colors 1,999
24-Bit. - 16 Million Colors.....3,099

19 Inch 256 Color Package!

Includes 19" DM-2060 Relax 8-Bit Video Board, & Cable!

$999

• 19" Hi-Resolution Color Packages

This offer is for a limited time only. The price is too good to last for long. 1024 x 768.

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• 19" Hi-Resolution Grayscale Pkgs.

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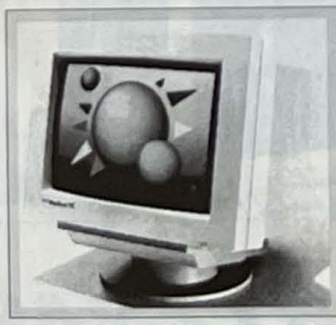
8-Bit - 256 Shades of Gray. 899



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$549

Video Boards

Mac II Family Video Cards

8-Bit - 256 Colors 13". 299
8-Bit - 256 Colors 19". 399
24-Bit - 16 Million Colors 19". 1,499

24-Bit Color Scanner

Relax 24-Bit Color Scanner Package

$1,349 As low as...

Available with Color Studio LE, and Scan-Do scanner Software. The Relax 24-Bit Scanner will scan 256 Grayscale or 16 million colors.

This is a single-pass, super-fast, 24-Bit, Color Scanner. Superior output at an affordable price!

24-Bit Color Scanner with Software.....1,599
24-Bit Color Scanner Only (110 volt)....1,349

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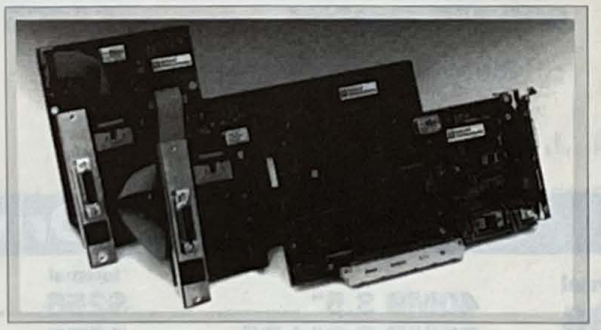

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Improve the performance of your network at low-cost. The Relax Ethernet solution is 100% guaranteed - or your money back!

Increase your data transfer rate by switching to EtherTalk. All Relax Ethernet cards come complete with necessary software and utilities.

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$6,599 "A" Size Color Printer

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Océ Graphic Tablet 299

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HP 7475 compatible - at half the cost!

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Includes Cartridge & 2-Year Warranty!

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Mobile 42 Cartridge.....68

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52 Meg. - Quantum, 11 ms.	279	339
60 Meg. - Seagate, 28 ms.	229	289
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105 Meg. - Quantum, 18 ms.	369	429
120 Meg. - Quantum, 18 ms.	599	659

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Vista Case - Fujitsu 20 ms.
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210 Meg. - Quantum, 12 ms.	759	819
300 Meg. - WREN, 16.5 ms.	1,099	1,159
330 Meg. - RUNNER, 11 ms.	1,299	1,359
600 Meg. - WREN, 16.5 ms.	1,449	1,509
660 Meg. - RUNNER, 12 ms.	1,849	1,909
1.0 Gig. - WREN-7, 15 ms.	2,249	2,309
1.6 Gig. - WREN-8, 15 ms.	2,999	3,059

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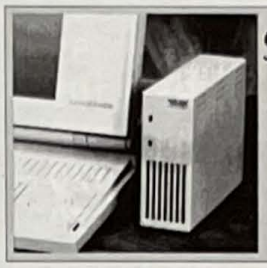

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Light-weight and rugged, the Sierra is the affordable and transportable hard disk!
$399
23 Millisecond Access!

46 Meg. Sierra - Seagate 28 ms. 249
90 Meg. Sierra - Maxtor 23 ms. 399

40 Meg. Pocket Portable
$339
Small, light-weight, and low power best describes this state-of-the-art drive system. Dimensions 1 x 4 x 8!

40 Meg. Pocket - Maxtor 17 ms. 339
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Erasable Magnetic Optical (MO) Disk Drives for Large Data Storage. Backup software and cassette included!

$1,999

All Optical Drives Include One Media & Software!

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All Tape Drives Include One Media & Software.

160 Meg. Tape Sierra - TEAC 499
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1.2 Gig.
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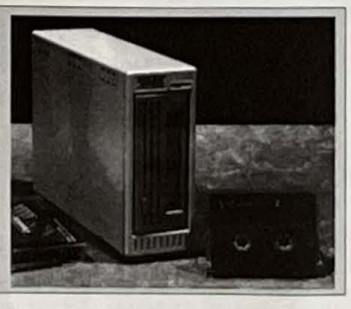

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1.2 Gig. - DAT 4 mm	19	14
2.2 Gig. - ExaByte 8 mm	18	13
600 Meg. - Optical - Plastic, 3M	139	129
600 Meg. - Optical - Plastic, PDO	129	99
600 Meg. - Optical - Glass, PDO	189	159
1.0 Gig. - Optical - Glass, Maxoptix	269	229
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ATTO

Silicon Express SCSI-2 Coprocessor for Mac	$950
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	Mac IIci	II,IIx	IIcx
33 MHz	-	$1175	Call for Pricing
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w/68882	$1095	$1510	
50 MHz	$1585	$1795	
w/68882	$1860	$1995	

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1MB X 8	$45
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EXTERNAL DRIVE KIT $109
Includes Power Cable, SCSI Cable, Instructions, Case and Software (Specify Macintosh Model)
Full Height Case Extra

INTERNAL DRIVE KIT $39
Includes Mounting Bracket, Cables, Instructions and Software (Specify Macintosh Model)
Internal 5 1/4" Drives for Mac II, IIx, IIfx

ACCESSORIES

Phone Net	(Mini-8)	$14
Phone Net	(DB9)	$14
Mac-SCSI Cable		$18
SCSI-SCSI Cable		$18

INSTALLATION KITS FOR IBM PC's & COMPATIBLES ALSO AVAILABLE

QUANTUM

MODEL	CAPACITY	ACCESS	INTERNAL	EXTERNAL
LPS	52 mb	12ms	$275	$345
LPS	105 mb	10ms	$455	$525
Plus	105 mb	11ms	$449	$519
PRO	120 mb	10ms	$599	$669
PRO	170 mb	12ms	$685	$755
PRO	210 mb	10ms	$755	$825

PRO Drives are 3.5" Half Height
Plus & LPS Drives are 3.5" 1/3 Height
Plus Drives are Low Power for Classic

All QUANTUM Drives have a TWO Year Warranty

SEAGATE

MODEL	CAPACITY	ACCESS	INTERNAL	EXTERNAL
385M*	337 mb	11ms	$1379	$1529
767M*	676 mb	12ms	$1849	$1999
702M	613 mb	16ms	$1449	$1599
766M	676 mb	15ms	$1549	$1699
1200M	1.0 gb	15ms	$2349	$2499

Seagate Drives are 5.25" Full Height
• Runner & Runner II Drives

All SEAGATE Drives have a ONEYear Warranty

MAXTOR

MODEL	CAPACITY	ACCESS	INTERNAL	EXTERNAL
7040 *	40 mb	17ms	$279	$359
7080 *	80 mb	17ms	$319	$399
213S†	207 mb	15ms	$709	$789
8380S	345 mb	13ms	$1189	$1289
8702S	613 mb	16ms	$1499	$1649
8760S	645 mb	16ms	$1649	$1799
1200S	1.0 gb	13ms	$2449	$2599

Drives are Full Height 5 1/4"
• 3.5" 1/3 Height Drive
† 3.5" Full Height Drive

All MAXTOR Drives have a TWO Year Warranty

CONNER

MODEL	CAPACITY	ACCESS	INTERNAL	EXTERNAL
3040 *	40 mb	25ms	$259	$329
30100 *	120 mb	19ms	$475	$545
3100	100 mb	25ms	$449	$519
3200	200 mb	15ms	$779	$859

• Low Power 3.5" 1/3 Height For the Classic & LC

All CONNER Drives have a ONE Year Warranty

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Items have a 30 Day, money back guarantee -some limitations apply.
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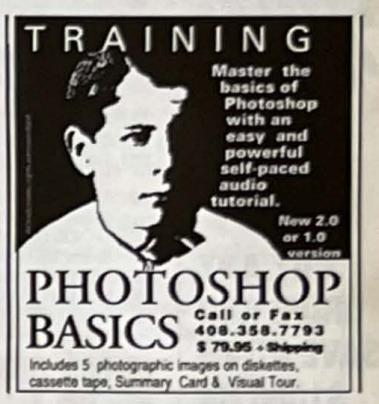
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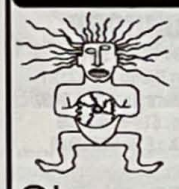

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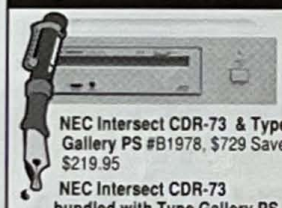

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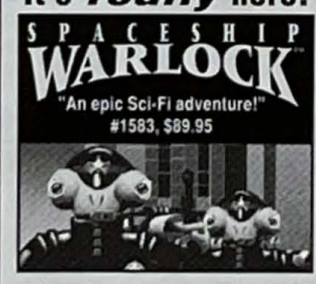

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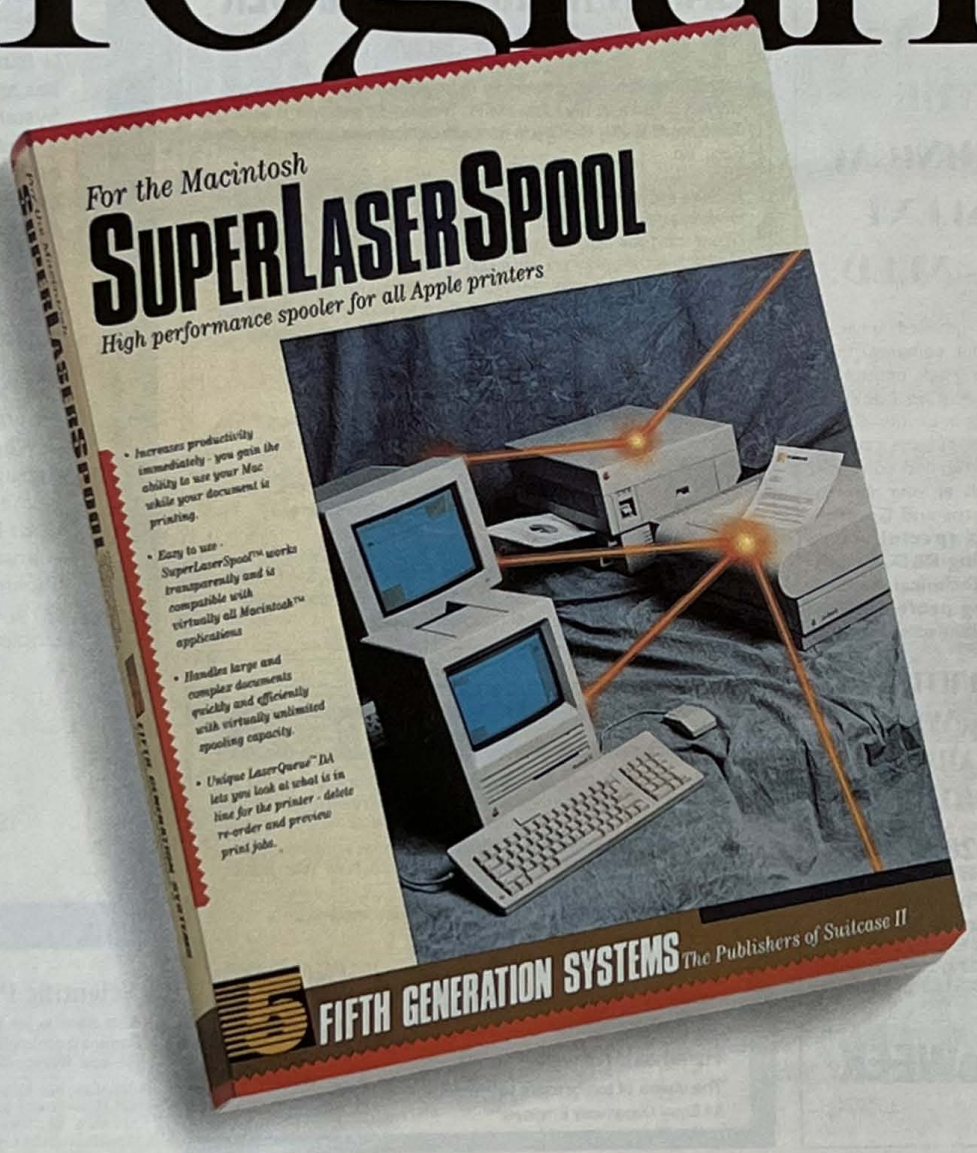
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BUSINESS WATCH

- Industry news
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Chang moves to shore up company

DOS line to be cut, half of staff laid off

By Dartanyan L. Brown

Santa Clara, Calif — A tough economic climate and changing customer-service needs have forced Chang Laboratories Inc. to modify its support policies, restructure its product line and lay off half its staff, according to the company.

Chang Labs is the developer of C•A•T III, a $495 contact-management program for the Mac. Company President Dash Chang said that to adequately support C•A•T III, he will have to jettison the company's MS-DOS products, which are no longer profitable, and cut his staff from 20 to 10 employees.

"We have reduced our Mac support staff by two people and are moving to smaller headquarters by August," Chang said. "This will put us in a positive cash-flow position and enable us to support C•A•T III and Rags to Riches, our accounting package, more effectively."

According to some users, C•A•T III, although powerful, can be difficult to learn. Even the most enthusiastic users noted the need for consistent technical support from the company.

"I now use C•A•T only when I have to," said Jerry Saperstein of FontBank in Evanston, Ill. "I gave up when [Chang Labs] started a pay-for-support policy and I'd get someone on the phone who didn't know the program as well as I did."

"It was impossible to reach [Chang Labs]," said Mike Koenig, president of Multicom Inc., an electronics contractor in St. Louis. "You'd make four or five calls and be lucky to get one back."

"We're working on that," Chang said. "We need to figure out a better way to support [users]. In most cases we are returning calls within an hour now. We also have a special help line to service our [large] corporate users such as Northern Telecom."

Last April, in answer to customer requests, Chang Labs shipped Version 1.1 of C•A•T III. It includes exporting of tab-delimited text files, improved search speed and a larger on-screen editing area.

Chang said his company also has a new subscription service to help support users. For $99 a year, cus-

See Chang, next page

John Matthias, president of Rent-A-Mac, the first Mac rental company to get Apple authorization, said Apple's new renter program will improve technician training and product quality.

New Apple authorization program for Mac rental companies launched

By Shawn Tomlinson

San Francisco — Launching a new Apple Authorized Dealer-Supported Renter Program, Apple this month gave its official blessing to Rent-A-Mac Inc., a rental company based here.

"We've worked with [Rent-A-Mac] and others to start this program," said Bob Silver, Apple's manager for dealer channels and sales. "It's taken this long because we had to put checks and balances in place."

Under the program, Rent-A-Mac and other as-yet-unnamed rental companies will send their personnel through Apple training programs and will conform to Apple's requirements for customer service and equipment maintenance. The rental companies will participate in Apple regional and corporate support programs.

Silver said Apple started the new program because of increased demand for Mac rentals.

By authorizing rental centers, Apple can help guarantee that customers are getting the best equipment and service, he said.

Rent-A-Mac Inc. has branch offices nationwide. The company worked directly with Apple over the past two years to help create the rental program.

ComputerLand Serramonte of South San Francisco, Calif., a dealer, will support Rent-A-Mac's branches.

"A lot of people have had bad experiences with rental companies; either the equipment doesn't work, isn't properly assembled, or the like," said John Matthias, president of Rent-A-Mac. "This is an assurance that that type of thing won't happen." □

SiCLONE Sales loses its wind, files Chapter 7

By Dartanyan Brown

Milpitas, Calif. — SiCLONE Sales & Engineering Corp. earlier this month slipped into Chapter 7 bankruptcy, citing a lack of operating capital and a changing product environment as reasons for its downfall.

SiCLONE President Jim Nakasuji acknowledged that all of SiCLONE's existing products had been sold to Carrollton, Texas-based Applied Engineering to meet its obligations to its secured creditors.

The Milpitas, Calif.-based maker of accelerator and cache cards for Macintosh computers was founded in February 1988.

The company's premier product was the Si3033 accelerator for the Macintosh II, IIx and IIcx. It featured a 33-MHz Motorola 68030 CISC (complex instruction set computing) processor and boasted an overall performance increase of 200 percent.

The next-generation accelerator from SiCLONE, a 50-MHz 68030

See SiCLONE, next page

Consolidation of business units puts 5% of DCA work force on the street

By Shawn Tomlinson

Alpharetta, Ga. — As part of a reorganization plan, Digital Communications Associates Inc., a major Mac networking developer, is laying off 50 senior- and middle-management employees. The cut represents about 5 percent of the company's 1,000 employees.

DCA has consolidated its five business units — including its Mac division — into one, making some positions redundant, according to the company. An additional 30 positions also have been eliminated through attrition.

"A year ago, DCA's products had become aged," said John P. Rohal, senior technology analyst for Alex Brown & Sons Inc. of Baltimore. "The company had to revitalize itself." Rohal said the layoffs are one sign the company is beginning to address these issues.

"DCA is made up of what you can consider small cottage industries," Rohal said. "Given [the large number of] products [DCA] has produced in the past six months, it isn't surprising to see the company taking a closer look at its infrastructure and tightening it."

After selling off its wide-area network division in 1989, the company has had a year of lower earnings. Earnings for the nine months ended March 31 were $13.6 million, or $1.10 per share, a 50 percent drop from the $28.8 million, or $1.94 per share, for the same three quarters last year. Revenues for the first three quarters of 1991 were $144.8 million, down from $149.7 million for 1990.

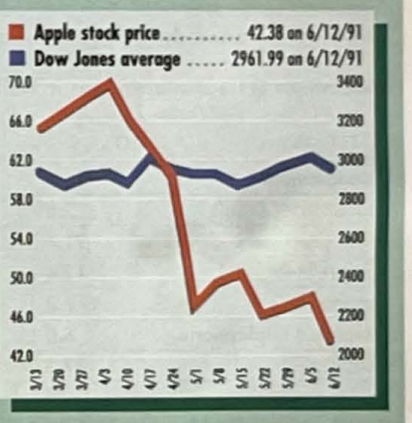
DCA claims its lower revenues and earnings were in part the result of the sale of its WAN division, which significantly reduced the company's overall size.

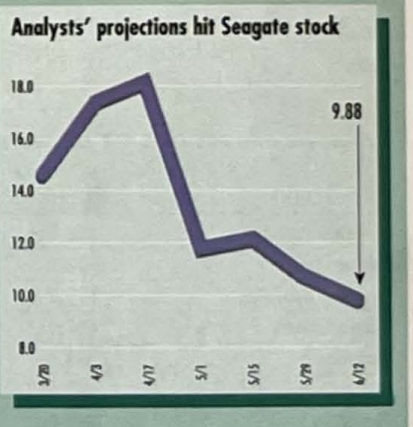
Rohal said he believes DCA's actions are a necessary adaptation to a changing marketplace. They should help the network developer regain lost ground, he said. □

StockWatch

	06.12.91 CLOSE	WEEKLY % CHANGE
Apple	**42.38**	**-11.72**
SOFTWARE DEVELOPERS		
Adobe	**47.38**	**-6.65**
Aldus	**46.25**	**-1.07**
Ashton-Tate	**11.25**	**9.76**
Caere	**21.25**	**-7.61**
CE Software	**5.00**	**-18.37**
Microsoft	**111.13**	**-0.78**
Symantec	**40.25**	**-9.55**
PERIPHERALS VENDORS		
CMS	**2.38**	**-5.00**
HP	**53.13**	**-1.62**
Mass Micro	**1.38**	**0.00**
QMS	**20.38**	**-5.23**
Radius	**6.50**	**1.96**
RasterOps	**24.25**	**-1.02**
Sigma	**9.38**	**-10.71**
STORAGE		
Conner	**17.88**	**-11.73**
Maxtor	**4.00**	**-5.88**
Quantum	**10.25**	**-13.68**
Seagate	**9.88**	**-16.84**
INDUSTRY INDICATORS		
Businessland	**1.13**	**0.00**
DEC	**65.13**	**-2.80**
IBM	**101.50**	**-1.58**
Motorola	**63.50**	**-7.47**
Sun	**34.00**	**-6.85**
Dow Jones	**2961.99**	**-1.44**

Compiled by Nordby International Inc.





Investors took Conner, Quantum, Seagate and other storage makers' stocks to the woodshed last week as analysts predicted that this sector faces a difficult future. Among the problems to surmount are overproduction (especially of 3.5-inch drives), price erosion, the national recession, the slump in retail sales and projections of sharply lower growth in the disk-drive sector in 1991.

Odesta sends Data Desk packing

Compass Software taking over product

By Mitzi Waltz

Northbrook, Ill. — Odesta Corp. this month passed off its Data Desk 3.0 numerical-visualization product to a newly created company, Compass Software Inc.

While Compass and Odesta will share office space for a while, the new company is not a spinoff in the classic sense, according to David Devoust, former Data Desk product manager at Odesta and now president of Compass.

"It's the same staff for technical support, the same staff for marketing as before," he said. "But there's no financial relationship." Compass soon will relocate to a facility near Wheaton, Ill., he said.

Data Desk, priced at $595, will be the new company's flagship package, but plans are under way to enlarge the Compass product line, according to Devoust.

"We see ourselves putting sophisticated tools in the hands of the everyday user, as Data Desk puts statistical analysis in the hands of the non-statistician," he said.

But he declined to identify specific market areas that the new company hopes to address.

The move follows Odesta's recent divestiture of GeoQuery, a mapping package now marketed by GeoQuery Inc. of Naperville, Ill. (see MacWEEK, Nov. 6, 1990).

"Odesta is consolidating its product line down to its core technologies," Devoust said. "[The company] is growing dramatically, but it's growing in a different direction. It's moving toward the VAX and other large platforms."

Odesta has added eight regional sales offices in the past few months and has beefed up support staff for its other products, which include the Odesta Document Management System (ODMS) and Double Helix relational database.

Officials said the company will continue working on products that link Macs with mainframe data.

Odesta will work with Compass to accommodate those customers who use both DataDesk and Double Helix.

"We're committed to making these products work together under System 7.0," Devoust said. □

Chang

From previous page

tomers will receive quarterly upgrades to the program, a newsletter called Templates and on-line help modules to answer commonly asked questions.

Chang blamed current problems on "the combination of the recession, the release of System 7.0 and changing single-user buying habits." But, said Chang, "we are in the midst of negotiations with venture capitalists for a higher level of funding."

That cash infusion, he said, will help him continue to provide new users with free support service for the first 90 days.

There are about 20,000 C•A•T and 10,000 Rags to Riches users on the Mac, Chang said. □

SiCLONE

From previous page

accelerator and cache card for the Mac IIci, never made it to market. Originally called the Intensifier IIci, it is now scheduled for release in August from Applied Engineering under the name Cache-In 50 (see MacWEEK, June 11).

Pat Gallagher, Applied Engineering's senior vice president of sales and marketing, said the acquisition "complements our core business and is part of our expansion strategy."

Among the factors Nakasuji cited for the demise of SiCLONE were lack of operating capital and Apple's aggressively priced and marketed IIfx upgrade for the Macintosh II and IIx computers.

"Many people chose to upgrade using Apple's components rather than ours," said Nakasuji. "It hit us hard, and we didn't have the staying power to get the Intensifier out the door.

"I don't want to blame Apple or anyone else," Nakasuji added. "It's just the nature of any business that piggybacks on what [Apple] does or doesn't do."

Although SiCLONE is effectively dead, Nakasuji and John Brisbin, SiCLONE's senior development engineer, said they are considering several possible projects together. In the interim, Brisbin said, both executives have agreements to assist Applied Engineering with support of the Cache-In 50 product. Owners of older SiCLONE products, however, will be left with no support.

SiCLONE employed more than 100 people in its 55,000-square-foot Milpitas manufacturing facility. □

MacWEEK index
FIRST-QUARTER SOFTWARE SALES

The Software Publishers Association recently released first-quarter 1991 sales figures for Macintosh, MS-DOS and Windows-based applications. All figures are for sales at retail. Both charts show last year's results and the percentage growth or decline between years.

Macintosh Q1 software sales in millions of dollars

CATEGORY	Q1 1990	Q1 1991	% CHANGE
Entertainment	$4.5	$4.5	0.0
Education	2.8	4.0	44.1
Word processors	21.7	28.7	32.0
Spreadsheets	12.4	13.3	7.2
Databases	8.3	8.6	4.0
Integrated applications	5.0	5.8	16.1
Graphics	37.3	43.4	16.2
Desktop publishing	8.5	10.3	21.5
Programming languages	2.6	4.9	86.2
Other	35.5	37.4	5.3
Total*	138.7	162.0	16.9

Windows and MS-DOS Q1 software sales in millions of dollars

CATEGORY	Q1 1990	Q1 1991	% CHANGE
Entertainment	$40.8	$56.3	37.9
Education	18.1	43.4	140.0
Word processors	199.2	195.2	-2.0
Spreadsheets	143.1	173.0	20.9
Databases	63.4	81.4	28.5
Integrated applications	31.6	22.4	-29.0
Graphics	78.8	97.2	23.3
Desktop publishing	18.8	31.3	67.0
Programming languages	21.4	32.8	53.1
Other	201.9	270.9	34.1
Total*	817.1	990.9	21.3

*Totals may be slightly affected by rounding.

Business BRIEFS

Howtek posts $1.3 million first-quarter loss

Hudson, N.H. — Howtek Inc., which recently dropped the price of its Personal Color Scanner, has posted a loss of $1.3 million, or 17 cents per share, for its first quarter ended March 31. The company made $173,000, or 2 cents per share, for the same period of 1990.

Howtek's revenues were $3.19 million for its first quarter, a 42 percent drop from the $5.55 million it made in the first quarter of 1990. The company blamed its loss on the declining world economy, manufacturing problems that have delayed its Personal Color Printer and increased competition in the low-end color-scanner market.

Howtek recently lowered the price of its 300-dpi, 24-bit-color flatbed scanner to $1,295 from $2,295 (see MacWEEK, May 21), making it one of the lowest-priced scanners for the Mac.

The lower price was possible because the company now sells directly to users, cutting out the dealer markup, Howtek said.

Seventh annual Boston Macworld Expo set

Boston — The seventh Macworld Expo/Boston will begin Tuesday, Aug. 6, with more than 400 vendor exhibits. The Macintosh exposition will close Friday, Aug. 9.

The show will include 10 conferences on topics as varied as design, multimedia, business and entertainment. As in past expos, the Boston show will be spread between the Bayside Expo Center and the World Trade Center. Show times are 10 a.m. to 6 p.m. on Tuesday, Wednesday and Thursday and from 10 a.m. to 3 p.m on Friday. As with last year's Boston Expo, there will not be an industry day.

Claris puts technical-help database on America Online

Santa Clara, Calif. — Using the same technical database that's used by the company's telephone support staff, Claris Corp. software users now can help themselves to technical support. The new do-it-yourself help is available on America Online, a national on-line information service.

Users have the choice of directly accessing the Claris database on America Online or downloading specific files in FileMaker Pro format. These support files are divided by product and feature type and include graphics to help the user. Claris plans to answer questions from the on-line service within 24 hours. The company will continue to provide telephone support 12 hours per day.

Frame opens European support operation

San Jose, Calif. — Frame Technology Corp., a document-publishing software developer, has negotiated a deal to start a European support operation in Dublin, Ireland.

The new center, approved by the Industrial Development Authority of Ireland, will support Frame's European distribution network with market-specific, translated versions of its Unix, Macintosh and NeXT products.

Called the European Operations Centre, the new Frame operation also will offer telephone technical support and create translated versions of the software documentation.

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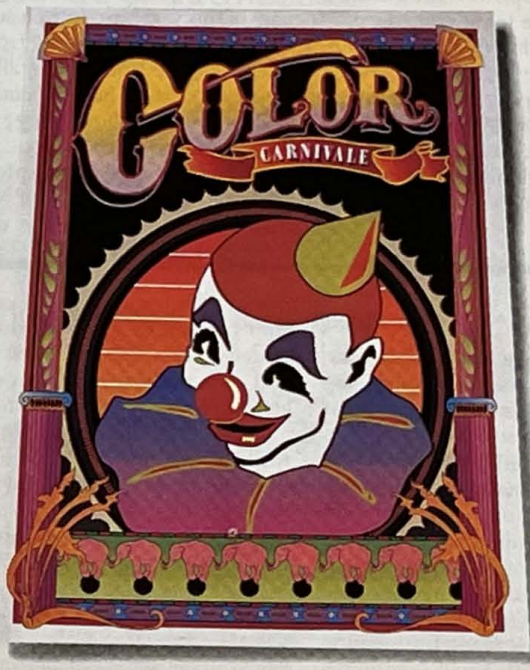

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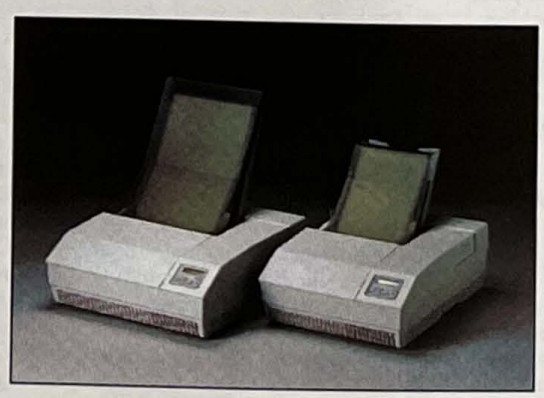

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RISC

From Page 1

"The [88110] is a fine product. It lacks the stellar floating-point performance of the IBM and [Hewlett-Packard] architectures, but 99.9 percent of Mac applications lack the need for that sort of performance," Allison said. "[Apple] can always throw an '860 [floating-point coprocessor] on if it needs it."

▸ **Grow its own?** Late last year, Apple acquired a 30 percent interest in Advanced RISC Machines Ltd., a Cambridge, England-based developer of RISC chips (see MacWEEK, Dec. 4, 1990).

ARM's chips, however, are designed more to be peripheral and I/O controllers than a primary CPU. Although ARM could potentially develop its own RISC CPU chips, that could take years, Allison said.

Apple RISC choices

COMPANY	PROCESSOR	PRODUCT
Hewlett-Packard	Prism	Apollo 9000 700 workstations
IBM	RS/6000	IBM POWERstation, POWERserver
Intel	i860	Levco B60i card
MIPS	R3000	DEC, Silicon Graphics, Sony, and MIPS workstations
Motorola	88110	(Unreleased)
Sun Microsystems	SPARC	SUN Workstations, clones

▸ **Why RISC?** Simply put, RISC technology works on the assumption that 80 percent of all executions can be handled by 20 percent of available instructions. Compare this to CISC (complex instruction set computing) chips, typified by Motorola's 68000 family used in all Macintoshes, which require increasingly more-complex code to handle more sophisticated functions.

The different approach means that RISC chips process more instructions per second than CISC chips running at the same clock speed, although more instructions are often required to perform the same task with RISC.

Today's RISC chips provide the kind of horsepower that makes them attractive for advanced workstations. High prices, however, have kept the technology out of the less-expensive microcomputer market. But as chip makers begin to achieve economies of scale, prices are beginning to drop sufficiently to make the chips a desktop option. □

Symantec

From Page 1

said it could not comment on an unannounced product.

Meanwhile, Santa Clara, Calif.-based Claris Corp. is planning an August debut for Claris Works, an integrated package developed by Scott Holdaway and Bob Hearn, the programmers who wrote the best-selling AppleWorks GS for the Apple IIGS.

Symantec, which last summer unsuccessfully bid against Claris for the six-application package, found another candidate in SmartWorks.

The package, originally slated for release last November, combines eight commonly used applications: outlining, writing, database, spreadsheet, charting, drawing, painting and communications. Based on shared core technologies, SmartWorks offers consistency, small size and speed, Leonard said when it introduced the product.

Symantec reportedly will add System 7 compatibility and some polish to the package, which, while easy to use, suffered from an inconsistent interface and bugs, according to several observers who saw demonstrations of it earlier this year.

Although a powerhouse in the DOS world, Symantec has a somewhat amorphous presence in the Macintosh market, analysts said. Its Mac product line contains two sets of utilities and a presentation package that it may phase out. The acquisition of SmartWorks would help Symantec tap into the new opportunities created by the low-cost Macs.

"Symantec is well-recognized and has good channels and [a good] distribution mechanism," said Ash Jain, vice president of Irvine (Calif.) Resource Group. "This gives it good leverage to introduce a product for a broad-based market. I think it has an excellent chance of competing with Claris and Microsoft."

Microsoft Works, which Jain said many resellers identify as the best-selling package in three different categories (databases, word processors and spreadsheets), represents a formidable foe.

Both Symantec and Claris are expected to market their products at a cost comparable to Microsoft Works' $295 price tag.

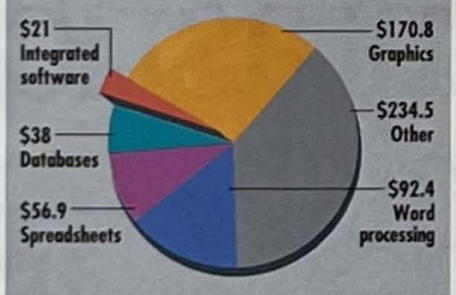
Dan Ness, industry analyst at Computer Intelligence of La Jolla, Calif., said: "First-time [Mac] buyers and low-end users tend to be a lot more price-sensitive. The ability to save hundreds of dollars [by buying one integrated package] is very appealing."

However, Ness said, sales opportunities for integrated software would be harder to come by among corporate customers.

System 7, which allows standalone applications to work together as if they were integrated, may affect the market for integrated software, but the near-term impact should be minimal, analysts said. Irvine's Jain said: "It will be at least a year before System 7 affects integrated packages. Perhaps integrated packages will not be as big a market as [they are] today, but they will continue to be big." □

Mac software market

1990 North American Mac software retail sales in millions of dollars



Source: Software Publishers Association

SNA•ps gateway in pipeline

By Margie Wylie

Cupertino, Calif. — Apple will roll out the Blue carpet at PC Expo in New York next week when it announces a software gateway designed to let Macs in on IBM's SNA networks and to establish some standards for other gateway makers.

Apple's product, called SNA•ps, will not differ much from other AppleTalk-to-SNA gateways already on the market, sources said. The software, running on a Mac equipped with Apple's token-ring card, will let any Mac on the network access IBM minis and mainframes on a Systems Network Architecture network.

Developers will be able to build applications that work with SNA•ps through an application programming interface that Apple hopes will become the standard for Mac SNA gateways. Currently, the three leading gateway makers — Avatar Corp., Tri-Data Corp. and Digital Communications Associates Inc. — each offer their own proprietary API. The gateway also will provide file transfer based on IBM's LU 6.2 protocol. □

Of mice and power adapters

By Henry Norr

Cupertino, Calif. — Apple last week recalled defective batches of two Mac components.

▸ **Mice.** Apple spokeswoman Kate Paisley said some mice shipped by Apple USA and Apple Pacific between September 1990 and January of this year have proven susceptible to damage from electrostatic discharge. The labels of the affected devices say "Made in USA" and carry serial numbers ranging from AP038xxxxxx to AP103xxxxxx.

▸ **Portable power adapters.** A "relatively small number" of Macintosh Power Adapters, the device used to bring power from wall outlets to the Mac Portable, may fail to charge the Portable's battery. The affected parts say "Made in Taiwan"; their serial numbers range from 9048A2xxxxxxx to 9116A2xxxxxxx.

Users with either of the affected parts should take them to an authorized dealer for replacement without charge, regardless of warranty status, Apple said. Neither problem poses any danger to users or their Macs, Paisley said, but "we want to be very proactive in getting these products returned and replaced and making people happy with their computers." □

MacIS

From Page 1

tools to manage mixed networks, keeping the issue in the same top spot it held after MacIS' previous meeting (see MacWEEK, Jan. 22).

The group said it wants Apple to keep network-management tools as a priority. In particular, MacIS members said they want Apple to put SNMP (Simple Network Management Protocol) support into AppleTalk, as well as create and support Management Information Bases (MIBs) that will feed information from AppleTalk devices into third-party SNMP consoles.

▸ **Enhance DAL.** MacIS called on Apple to support more clients, servers and databases with its Data Access Language. Members also want the company to support more network protocols or network cards, support non-SQL data sources, provide access to data-dictionary environments, publish a DAL position paper and create user forums.

"DAL is a necessary ingredient to making client-server computing effective across the enterprise," said J.D. Welch, director of internal support systems at McCaw Cellular Communications Inc. in Kirkland, Wash. "We felt that Apple was not giving DAL the level of engineering and development support it requires as a strategic product."

▸ **Implement system-software security.** Members said they want Apple to add user-assigned security at the machine, folder and document levels; explicit access permission in Mac file-sharing defaults under System 7.0; password aging; and user-notification when others attempt to log onto their systems.

▸ **Publish VITAL.** VITAL (Virtually Integrated Technical Architecture Lifecycle) is a set of guidelines developed by Apple's Information Systems & Technology Group for developing client-server applications.

MacIS members said they want Apple to share and explain the VITAL vision. MacIS also called for Apple, in the next six to nine months, to publish an enterprisewide framework of VITAL, similar to IBM's Systems Application Architecture. This framework should include details on implementing cooperative processing, members said.

"VITAL is the direction all of us would like to be heading, and we need to understand how Apple is implementing it," said Mary Howlett, manager of management-information technology at Hughes Aircraft Co.'s Ground Systems Group in Fullerton, Calif. "This is a good opportunity for Apple to demonstrate partnership with its customers."

▸ **Commit to "commercial-strength" support.** MacIS' recipe for such support includes greater emphasis on support after the sale, rewarding support teams for developing long-term customer relationships and improving national account executives' understanding of system-level concepts.

▸ **Beef up network security.** MacIS members asked Apple for technologies that would encrypt network packets, automatically disable an account after a specified number of unsuccessful log-on attempts, and make it possible for network managers to require minimum password lengths and force periodic password changes under AppleTalk.

▸ **Introduce a full notebook line.** MacIS reaffirmed the importance of a full line of notebook Macs. The group particularly emphasized a high-end machine it said should weigh between 6 and 8 pounds; include an active-matrix backlit display, a 68030, at least a 40-Mbyte hard drive and 4 Mbytes of RAM; and work with a docking station that has at least three NuBus slots.

▸ **Improve TCP/IP support.** MacIS specifically requested Apple to add TCP/IP protocol layers 1 through 4 to the Communications Toolbox and to support the Serial Link Internet Protocol (SLIP) wide-area networking protocol.

▸ **Build in Ethernet.** MacIS asked Apple to build Ethernet into all future CPU and printer products.

▸ **Support "alliance" products.** MacIs asked Apple to improve its support of the Mac components of Digital Equipment Corp.'s Pathworks, for example.

"When Apple licenses its products to others, it has to make sure the product gets the same level of support as if it was marketed directly," said McCaw's Welch. "This is a big issue for a lot of people." □

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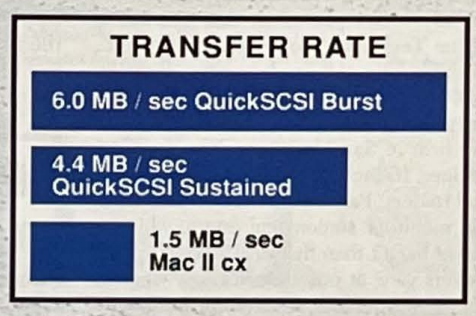

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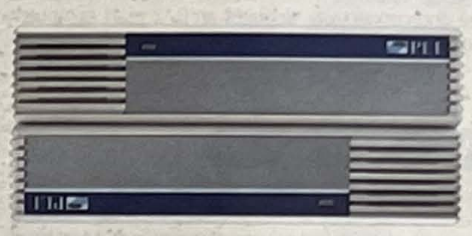

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Apple/IBM

From Page 1

An alliance with Apple would give IBM access to a proprietary and superior operating system and reduce its reliance on Microsoft, said Ash Jain, vice president of client services for The Irvine Resource Group, a market research firm in Irvine, Calif.

"In 1984, IBM was the undisputed leader, but since then it has lost control of the PC architecture it created to Microsoft and the clone makers," Jain said. "Apple's operating system technology could allow IBM to close up its architecture and help protect it from clone makers in the future."

Analysts warned, however, that adopting the Apple system would cause some major problems for IBM. The company repeatedly has emphasized its commitment to the forthcoming OS/2 2.0. Integrating Apple's operating system technology, except for its communications software, would confuse the market, according to Peter Rogers, an analyst with Robertson, Stephens & Co. in San Francisco.

"The last thing IBM needs to do is to stray from its OS/2 2.0 course," Rogers said. "Having Claris develop for OS/2, however, or IBM align itself with Apple makes political sense, especially if Apple wins its lawsuit against IBM."

In the short term, IBM may be interested in licensing Apple's recently announced QuickTime multimedia technology. Neither IBM nor Microsoft has equivalent technology, which allows standard application software to incorporate digital video into documents.

For Apple, a deal with IBM could help fund its ambitious development projects. Although it remains cash-rich, the company reportedly feels a financial strain as R&D costs escalate while margins decline. Sources said Apple is already $20 million over its R&D budget of more than $500 million for the current fiscal year, which ends Sept. 30. CEO John Sculley has also reportedly mandated that product development groups find co-financing for some projects, including servers, A/UX and future workstations.

In addition to meeting with IBM, Apple reportedly has held discussions in recent months with Hewlett-Packard Co. and Digital Equipment Corp., as well as several Japanese electronics giants.

The talks with IBM could influence Apple's choice of a RISC processor for its future machines. The company had until recently been expected to settle on the 88000 series from Motorola Inc., which supplies the microprocessors at the heart of every Macintosh.

But with its soon-to-be-portable operating system, Apple could switch chips. Some of the company's engineers are said to favor a move to the IBM processor or RISC designs from other manufacturers (see story, Page 1).

Even rumors of a licensing agreement or joint venture with IBM could enhance Apple's credibility among true-Blue corporate customers.

"This alliance is probably more smoke than heat, but it does add to the perception that the Mac is not the outsider some PC enthusiasts make it out to be," said Tom Mullaney, manager of systems and administration at ARCO Products Co. in Los Angeles. "Not only does this show that IBM takes Apple seriously, it also shows that Apple is big and mature enough to deal with the biggest microcomputer company eyeball to eyeball."

Mary Howlett, manager of management-information technology at Hughes Aircraft Co. in Fullerton, Calif., agreed. "I think that having Macs in a major operation will be much easier for MIS managers to swallow now that they see that even IBM recognizes Apple as a major player," she said. "This is the first time I've seen IBM admit that Apple is a player and that maybe it's time for them to connect up with Apple." □

Monitors

From Page 1

Hartsook pointed out that the '040 Macs will compete against workstations from such companies as Sun Microsystems Inc. and NeXT Inc. that have standardized on 16-inch displays. He added that System 7.0, with features such as multitasking and publish and subscribe, will get Mac users yearning for larger displays.

The market for Mac 16-inch displays is now dominated by E-Machines Inc. of Beaverton, Ore., which sells more than 1,000 16-inch displays a month (see chart, Page 106).

Executives at E-Machines said they would welcome competition from Apple: "We can't wait for Apple to come out with a 16-inch monitor," said E. Michael Loftus, E-Machines vice president of marketing. "Every time Apple enters a new market, they legitimize it for the companies already there."

The only other player in this market is SuperMac Technology of Sunnyvale, Calif., which offers a 16-inch color display for $2,700.

Montgomery Securities, an investment banking firm in San Francisco, purchased 35 E-Machines 16-inch displays for its stockbrokers and traders. Paul Evenson, vice president, said the monitors' screen real estate, which is 70 percent bigger than that of 13-inch displays, lets brokers view at one time several windows of stock quotes, charts, a scrolling news wire service and a moving ticker tape.

Evenson predicted Apple will find a pent-up demand for large-screen displays from users who can't afford a 19- or 21-inch monitor. "Everybody wants a bigger screen," he said, "but your average working-class guy can't pay $5,000 for a monitor. The price of a 16-inch monitor is much more reasonable."

Catherine Bull, a research analyst at Dataquest Inc., a market research company in San Jose, Calif., agreed that the expected $1,599 price of Apple's 16-inch display will convert new customers to large-screen displays. "At that price, [Apple] will get a lot of business users and a lot of graphics users," she said. □

Rollout

From Page 1

tions for several existing models, including the Mac LC, IIsi, IIci and IIfx. The six-slot IIfx reportedly is in line for the largest cuts, when the new tower Mac replaces it as the top machine of the Mac line.

Two new high-speed LaserWriters are slated for introduction on Oct. 2 at the 1991 Seybold Computer Publishing Conference & Exposition in San Jose, Calif. Originally scheduled for release in July, the '030-based printers will replace the aging LaserWriter IINT and IINTX.

One of the new models, called the LaserWriter IIG, will include a 25-MHz 68030, a math coprocessor and built-in Ethernet support. It will be capable of gray-scale output and will be priced at about $5,000, sources said. The LaserWriter IIF, powered by a 20-MHz '030, reportedly will list for about $4,000. □

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Stylish cutbacks all the rage

People of age remember when summer was a time of long, lazy afternoons and relaxed vacations. It was not at all like life here in the modern world on the cusp of the 21st century, when everyone from Johnny Carson to George McGovern has seen the future and decided to cut his losses while there is still time.

While third-party monitor vendors are still licking their wounds over Apple's plans to venture into the large-screen monitor market, there's a potential summer surprise in store for those hearty folks who operate in the third-party hard disk drive market.

Apple is cutting some losses, too, this time in the market. Next month's Apple price list may be minus the 20-, 40- and 160-Mbyte Apple external drives. In additional news sure to gladden the hearts of these same third-party vendors, the Knife reports that all internal drives are expected to be dropped from the price list. Should all of this actually come to pass, any Mac not configured with an Apple-logoed drive at the time of purchase will forever be driven by a third-party product.

In the historical footnote department, here's another Apple drive-related item. Beginning sometime in August, Apple will begin using a newer, more cost-efficient 80-Mbyte internal drive.

Then there's the timing of the replacement for the current four-bit Apple scanner. Sources assure the Knife that the new eight-bit scanner, code-named Half Dome, will finally make its debut in August. These same sources are anticipating a retail price of $1,499 for the new scanner.

While there is no definite word on when the replacement for the aging AppleCD SC will arrive, there are indications that Apple hopes to get it on the price list sometime this summer. The Knife is receiving reports of spot shortages of the CD SC and quotes of very long lead times. Sounds a lot like the new AppleCD Plus is just around the corner.

System 7.1. Development of AppleMail is muddling along as well as can be expected, given all that's going on at Apple recently. Latest word is that the AppleMail Event Handler Toolbox will be distributed to developers sometime this summer and, if all goes well, will ship in the fall as a part of System 7.1. Developers are already contemplating hooking their applications into the AppleMail engine via Apple events. This opens up a new level of utility for users. Applications that are AppleMail-aware will be able to interact without gateways. For example, WordPerfect Office users could exchange messages with QuickMail users without a gateway.

There's good news for the third-party crowd in this item, too. Sources say Apple has canned its ambitious Apple Mail client project, thus making the world safe for the CE Softwares, Microsofts and cc:Mails of this world.

Apparently the rumors received by the Knife that AppleShare 3.0 will include a remote booting feature were somewhat exaggerated. The word now is that when it ships later this year, AppleShare 3.0's server support will sport only a few scant bells and whistles more than are currently available in System 7.0's Personal AppleShare (now dubbed "Macintosh file sharing" by Cupertino's Ministry of Names).

The Massachusetts solution. Apple has always been big on education, and lately it's been doing a fairly convincing job of emulating the employment policies of state education departments from Massachusetts to California. This refers, of course, to layoffs present and future. While Apple is apparently doing its best to minimize the effect of the cuts by making new positions available to the marked ones wherever possible, morale has shown no improvement. It's still, as they say, in the cellar.

On the hit-list parade this week is Apple USA, which, according to the Knife, is expected to lose about 500 souls, approximately 10 percent of the total, in the current unpleasantness. □

Although it might be news to Chuck Robb and Douglas Wilder, the classic MacWEEK mug is much more stylish nowadays than the Democratic Party's nomination to almost any national office. To get in on the good thing, contact the Knife at (415) 243-3500, (fax) 415 243-3560, MCI (MactheKnife), AppleLink (MacWEEK) or CompuServe/Zmac.

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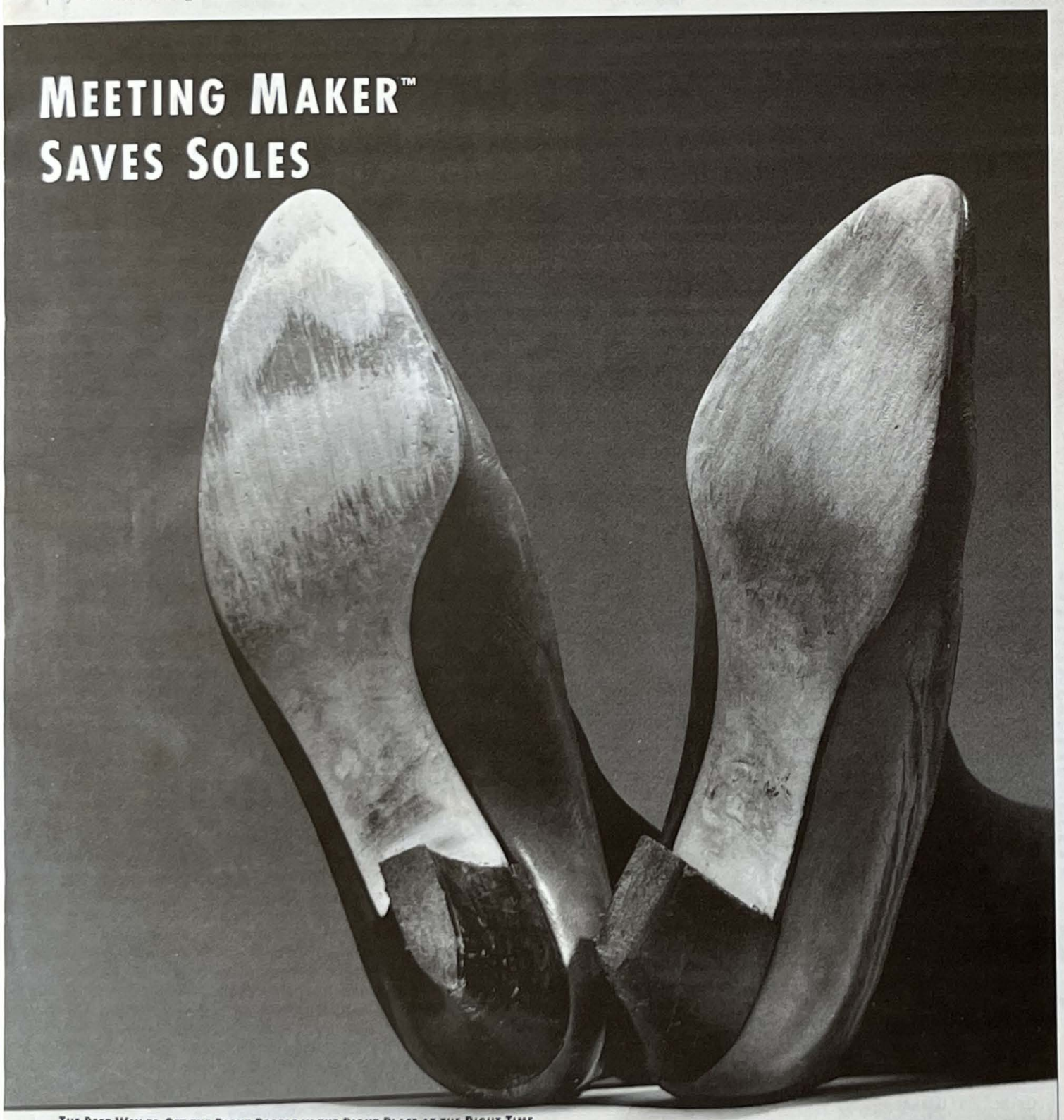

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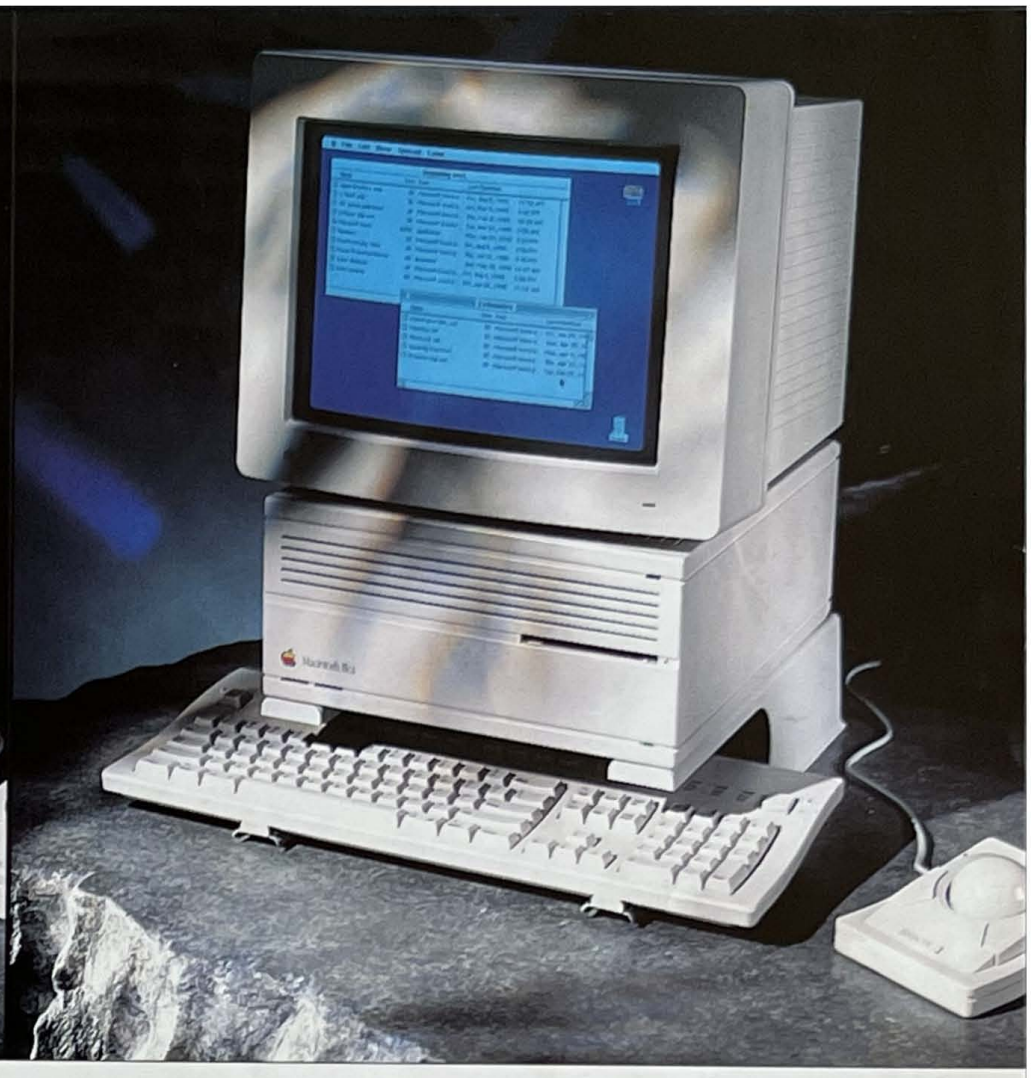

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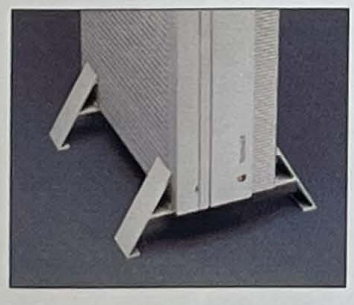

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